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SUPPLEMENT No. 2
PROFESSIONAL MEMOIRS
NOVEMBER-DECEMBER, 1918.
VOL. X. NO. 54.

Screw Threads

Bibliography of Available Material on the Systems, and Classification of Screw Threads, including Tolerances, Allowances and Symbols of Nomenclature; and on Gages, Methods of Testing, and Specifications. [August to October, 1918.]

Prepared at request of the U. S. Screw Thread Commission and arranged in alphabetic order according to Authors and Titles, and with an Index.

By

HENRY E. HAFERKORN

Librarian,
Engineer School Library.

WASHINGTON BARRACKS, D. C.
PRESS OF THE ENGINEER SCHOOL
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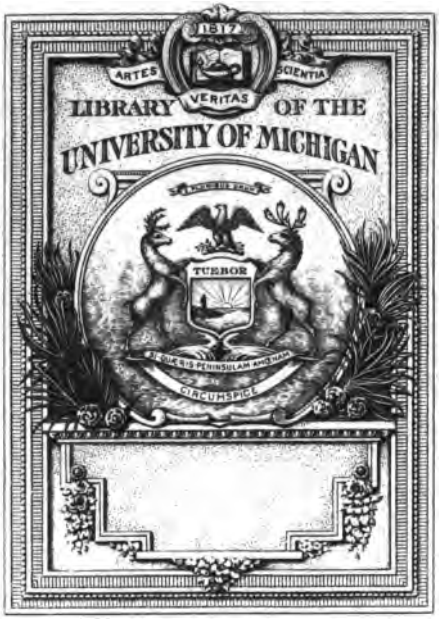
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PREFATORY NOTE.

The aim of this Bibliography is to furnish accounts as complete as possible, of the various domestic and foreign forms and systems of screw threads, together with reports of professional men, relating to their actual experience and study along these lines.

It is not the purpose to furnish a list of patents or titles of text-books containing treatises on screw threads for the different trades and professions, but a comprehensive view of existing conditions.

With this point in view, and with the earnest desire to assist to the greatest extent the Commission in its labors, more than 500 volumes of books, periodicals and society transactions have been examined.

Considerable difficulties have been met in obtaining the proper sources, some of which could not be found in local libraries or, when found, were not available.

It will be noted that the modern heading of the Engineering Standards Committee of London is now, British Engineering Standards Committee, its publications being published by the British Engineering Standards Association. The old form has been retained in case of such titles as were originally printed under that heading, and would naturally be entered accordingly in the library catalogues.

The present simple form of arrangement of this Bibliography, with an index, was adopted because it was considered the most convenient and it is hoped will meet with approval.

Accuracy in the smallest details of the individual entries has been sought. There may be found, however, errors or inaccuracies not detected during the revision of copy or during proofreading. The undersigned will be very grateful if such mistakes are made known to him, so that they may be corrected in another issue of this publication.

November 25, 1918.

H. E. HAFERKORN.

ABBREVIATIONS.

The initials at the end of titles refer to Libraries where the publications will be found, viz: Bur. St., U. S. Bureau of Standards, Dept. of Commerce, Washington, D. C.; CE: Library, American Society of Civil Engineers, 29 W. 39th St., New York City; E: Library, Engineering Societies, 29 W. 39th St., New York City; ES: Engineer School Library, Washington Barracks, D. C.; LC: Library of Congress, Washington, D. C.; P.O.: U. S. Patent Office, Scientific Library, Washington, D. C.; ES.—Pam. signifies that the article has been clipped and pasted in a scrap-book, filed as pamphlet.

Titles to which no initials are affixed have not been located in Libraries available to us.

Publications found in the LC., show the call-number in each case for the convenience of the reader, and the Library staff, for instance Title number 153: Jeffcott. Notes on screw threads, LC., meaning Library of Congress, (TJ1 I 5, pts. 3-4, 1907), the notation in parenthesis represents the call-number, which is needed to locate the publication on the shelves of the Library of Congress.

ES—Pam. signifies that the article has been clipped out and pasted in a scrap-book, filed as pamphlet.

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SCREW THREADS.

BIBLIOGRAPHY OF AVAILABLE MATERIAL ON THE SYSTEMS, AND CLASSIFICATION OF SCREW THREADS, INCLUDING TOLERANCES, ALLOWANCES AND SYMBOLS OF NOMENCLATURE; AND ON GAGES, METHODS OF TESTING, AND SPECIFICATIONS. PREPARED AT REQUEST OF THE U. S. SCREW THREAD COMMISSION AND ARRANGED IN ALPHABETIC ORDER ACCORDING TO AUTHORS AND TITLES, AND WITH AN INDEX BY MR. HENRY E. HAFERKORN, LIBRARIAN, ENGINEER SCHOOL LIBRARY, WASHINGTON BARRACKS, D. C., AUGUST TO OCTOBER, 1918.

ABBREVIATIONS.

For periodicals, society papers, and other serial publications the following abbreviations have been adopted, viz:

Am. E. R. J.: American Engineer and Railroad Journal, New York.

Am. I. M. E.: American Institute of Mining Engineers, New York. Transactions.

Am. Mach.: American Machinist, New York.

Am. Ry. M. M. A.: American Railway Master Mechanics' Association, Chicago. Reports of proceedings.

Am. Soc. M. E.: American Society of Mechanical Engineers, New York. Journal; Transactions.

Am. Soc. T. M.: American Society for Testing Materials, Philadelphia, Pa. Proceedings.

Autom. Ind.: Automotive Industries, New York.

Cass. E. M.: Cassier's Engineering Monthly, London.

Elec. W.: Electrical World, New York.

Eng.: Engineering, London.

Engi.: The Engineer, London.

Eng. N.: Engineering News, now changed to Engineering News-Record, New York.

Frank. I.: Franklin Institute, Philadelphia. Journal.

Inst. Civ. E.: Institution of Civil Engineers, London. Minutes of proceedings.

Génie C.: Le Génie Civil, Paris.

Hist. E. R.: History and early reports of the Master Car Builders' Association.

Horseless A.: Horseless Age, New York. (Since July, 1918 merged with Automotive Industries, N. Y.)

Inst. Aut. E.: The Institution of Automobile Engineers, London. Proceedings.

Inst. Mech. E.: Institution of Mechanical Engineers, London.

Iron Age.: Iron Age, New York.

J. Ry. App.: Journal of Railway Appliances, New York.

Mach. Eng. ed.: Machinery, New York. Engineering edition.

Mach. Shop ed. Machinery, New York. Shop edition.

Mach.: Machinery (general edition), New York.

Master C. B. A.: Master Car Builders' Association, Chicago.

Mech. Eng.: Mechanical Engineer, Manchester, England.

Mech. W.: Mechanical World, London.

Monthly C. R.: U. S. Monthly Consular Reports. Dept. of Commerce and Labor, Bureau of Statistics, Washington, D. C.

N. Phys. L.: National Physical Laboratory, Teddington, England. Collected researches.

Power: Power, New York.

P. Eng.: Practical Engineer, London.

Ry. Mach.: Railway Machinery, New York. (Now changed to Machinery.)

Ry. Mech. E.: Railway Mechanical Engineer, New York.

Ry. R.: Railway Review, Chicago.

Rev. M.: Revue de Mécanique, Paris.

Rev. Tech.: La Revue Technique, Paris.

Sci. Am.: Scientific American, New York.

Sci. Am. S.: Scientific American Supplement, New York.

Soc. Autom. E.: Society of Automotive Engineers, New York. Journal; Transactions.

S. E. I. N.: Société d'encouragement pour l'industrie nationale, Paris.

Tech. M.: Technique Moderne, Paris.

V. D. I.: Zeitschrift des Vereins deutscher Ingenieure, Berlin.

Z. O. I. A.: Zeitschrift des Oesterreichischen Ingenieur-und Architekten Vereins, Wien.

Zeit. Werkz: Zeitschrift für werkzeugmaschinen und werkzeuge, Berlin.

A. BOOKS.

1. AUBAILE, ALEXIS.

Filetages universels systéme Aubaile. Paris, 1904.

2. CASTNER, J.

Der schraubenverschluss mit plastischer liderung und der keilverschluss mit huelsenliderung fuer geschuetze. Reprinted from "Schiffbau," no. 5, Dec. 13, 1905.

See review of this pamphlet in: (Eng.), v. lxxxv, Jan. 3, 1908, p. 6-7.
ES. 15328 LC.(TA1,E55,v.85)

Brief review of the screw breech block in the French service, followed by statements relating to the wedge-block designed by Krugg in 1859. Author favors th latter owing to its greater mechanical simplicity. See also: Screw and wedge breech-mechanism (Eng.), Feb 14, 1908, p. 207, under no. 244.

3. COLVIN, FRED. HERBERT.

Jigs and fixtures. A reference book showing many types of jigs and fixtures in actual use, and suggestions for various cases. By Fred H. Colvin and L. L. Haas. N. Y., McGraw-Hill book co., 1913.

ES 20275 LC(TJ1185 C68)

Chap. xi. Designs of and materials for gages, p. [117]-133. Chap. xii. External and internal thread gages, p. [134]-141. Chap. xiii. Miscellaneous manufacturing gages, p. [141]-152.

4. COLVIN, FRED. HERBERT, comp.

Screw machine kinks, comp. by F. H. Colvin and F. A. Stanley, New York [etc.], Hill pub. co., 1908.

3 p. l., 88 p. illus. diagrs. 16cm. (Half-title: The Hill kink books.)
Originally pub in Am. Machinist. LC.(TJ1222 C67)

5. COLVIN, FRED. HERBERT, comp.

Screw thread kinks, comp. by F. H. Colvin and F. A. Stanley. New York, Hill pub. co., 1908.

3 p. l., 107 p. illus., fold. tables, diagrs. 16cm. (Half-title: The Hlil kink books. LC.(TJ 1222 C68)

Originally pub. in the Am. Machinist.

6. ENGINEERING STANDARDS COMMITTEE, London.

British standard pipe threads for iron or steel pipes and tubes. Leslie S. Robertson, M. Inst. C. E., secretary. Lond., C. Lockwood & son, 1905, LC. (TJ415E5).

8 numbered leaves, tab., diagrs. 33cm. ([Report] no. 21.)

At head of title: Report issued by the Engineering standards committee . . .

Report of the committee on screw threads and limit gauges.

7. ENGINEERING STANDARDS COMMITTEE, London.

British standard screw threads. Leslie S. Robertson, M. Inst. C. E., secretary. Lond., C. Lockwood & son, 1905.

8 numbered leaves. iv tab., 2 diagrs. 33cm. ([Report] no. 20.) LC(TJ1 340E5)

At head of title: Interim report issued by the Engineering standards committee . . .

Printed on one side of leaf only.

Report of the Committee on screw threads and limit gauges.

8. ENGINEERING STANDARDS COMMITTEE, London.

British standard screwing for marine boiler stays. Leslie S. Robertson, secretary. Lond., pub. at the offices of the committee, Westminster, 1913.

2 leaves, 33cm. ([Report] no. 62.) Dated Aug., 1913. Bur. St.

9. ENGINEERING STANDARDS COMMITTEE, London.

British standard screw threads and pipe threads. Leslie S. Robertson, secretary. Westminster, offices of the committee, 1906. LC(TJ1340 E6)

4 p. 33cm. ([Report] no. 34.)

10. ENGINEERING STANDARDS COMMITTEE, London.

British standard specification for copper-alloy three-piece unions for low and medium pressure British standard screwed copper tubes (primarily for domestic and similar work). . . . Lond., pub. for the committee by C. Lockwod & son, 1914.

19 numbered leaves, illus. 33cm. ([Report] no. 66.) LC.(TS 280 E58)

Leslie S. Robertson, sec'y.

11. ENGINEERING STANDARDS COMMITTEE, London.

British standard specification for copper tubes and their screw heads (primarily for domestic and similar work). Lond., pub. for the committee by C. Lockwood & son, 1913.

16 numbered leaves, incl. tables, diagrs. 33cm. ([Report] no. 61. LC. (TS 280 E6)

12. ENGINEERING STANDARDS COMMITTEE, London.

Combined reports on British standard screw threads. Leslie S. Robertson, secretary. London, pub. for the committee by C. Lockwood & son, 1907.

42 leaves, incl. illus., tables, diagrs. 33cm. ([Report] no. 39.) LC.(TJ 1340 E4)

Various paging.

Contents.—[Report] no. 20. British standard screw threads. 1905.—[Report] no. 28. Report on British standard nuts, bolt-heads, and spanners. 1906. [Report] no. 38. Report on British standard systems for limit gauges for screw threads.

13. ENGINEERING STANDARDS COMMITTEE, London.

Report on British standard dimensions for sparking plugs for internal combustion engines. Revised Sept., 1917. Lond., pub. for the committee by C. Lockwood & son, 1917.

12 p. illus. 22cm. ([Report] no 45, 1917.) LC.(TJ787,E5,1917)
This report supersedes Report no. 45, and the interim report (c. I. 2877) issued in Dec., 1915.

14. ENGINEERING STANDARDS COMMITTEE, London.

Report on standard dimensions for the threads of sparking plugs (for internal combustion engines). Leslie S. Robertson, secretary. Lond., pub. for the committee by C. Lockwood & son, 1909.

7 numbered leaves, incl. tables, diagr. 33cm. ([Report] no. 45.)
LC.(TJ 787 E5)

15. ENGINEERING STANDARDS COMMITTEE, London.

Report on British standard heads for small screws. Leslie S. Robertson, M. Inst. C. E., secretary. London, pub. for the committee by C. Lockwood & son, 1911.

9 numbered leaves, incl. tables, diagrs. (tab., fold.), 33 cm. ([Report] no. 57.)
LC.(TJ1340 E65)

16. ENGINEERING STANDARDS COMMITTEE, London.

Report on British standard nuts, bolt-heads, and spanners. Leslie S. Robertson, M. Inst C. E., secretary. Lond., pub. for the committee by C. Lockwood & son, 1906. LC(TJ 1330 E6)

11 numbered leaves, incl. illus., iv tables. 33cm. ([Report] no. 28.)
Preface signed: H. F. Donaldson, chairman of the sectional committee on screw threads and limit gauges.

17. ENGINEERING STANDARDS COMMITTEE, London.

Report on British standard systems for limit gauges for screw threads. Leslie S. Robertson, secretary. Lond., pub. for the committee by C. Lockwood & son, 1907.

19 numbered leaves, incl. illus., tables, diagrs. 33cm. ([Report] no. 38.)
LC.(TJ 1340 E55)
Preface signed: H. F. Donaldson, chairman of the sectional committee on screw threads and limit gauges.

18. ENGINEERING STANDARDS COMMITTEE, London.

Report on British standard threads, nuts and bolt heads for use in automobile construction. Leslie S. Robertson, secretary. Lond., pub. for the committee by C. Lockwood & son, 1911.

10 numbered leaves, incl. tables, diagrs. 33 cm. ([Report] no. 54.)
LC.(TL275 E6)

19. FERRUS, L.

Culasses à vis et culasses à coin. Par L. Ferrus, L'armée française. Paris, Berger-Levrault et cie., 1908.

Reprinted form "Revue d'Artillerie," Jan., 1907.
See review in: (Eng.), v. lxxxv, Jan. 3, 1908, p. 6-7.
ES. 15328 LC.(TA1,E55,v.85)

Major Ferrus discusses the merits of the screw and wedge breech-blocks, and is in favor of the first.
His essay is an answer to the paper by Mr. J. Castner.

20. FRANKLIN INSTITUTE, Philadelphia.
The Sellers or Franklin Institute system of screw-threads. A correspondence growing out of an inquiry addressed to the Institue by the Society of German Engineers. . . . [Philadelphia, 1887.]

Cover-title, 16 p. 23cm. LC.(TJ 1340 F8)
"Reprinted from the Journal of the Franklin Institute, April, 1887."

21. GENTRY, G.
Standard guide to screw threads. Lond., N. Y., E. and F. N. Spon [etc.], 1907.

77 p. illus., 23cm.

22. GREAT BRIT. WAR OFFICE. Committee on standard leading screws for screw-cutting lathes.
Report of a committee appointed to consider the provision of standard leading screws for screw-cutting lathes. . . . Lond., printed for H. M. Stat. off., by Harrison & sons [1905].

24 p. plates, diagrs. (part fold.) plan. 33 cm. LC.(TJ1340 G7)
H. F. Donaldson, president.

23. GRIMSHAW, ROBERT.
Shop kinks. ed. 4. N. Y., N. W. Henley pub. co., 1904.
ES 3222 LC(TJ1165 G88)

Screw-threads, p. 147, 148, 187.

24. HAMILTON, DOUGLAS THOMAS.
Automatic screw machines. A treatise on the construction, design, and operation of automatic screw machines and their tool equipment. By D. T. Hamilton and Franklin D. Jones. N. Y., Industrial press, 1916.
ES 23561 LC(TJ1215 H3)

Contents.—Chap. i. Screw classification and development, p. 1-10. Chap. ii. Single-spindle automatic screw machines, p. 11-38. Chap. iii. Multiple-spindle automatic screw machines, p. 39-83. Chap. iv. Automatic screw machine tool equipment, p. 84-147. Chap. v. Adjusting or setting-up automatic screw machines, p. 148-196. Chap. vi. Attachments for automatic screw machines, p. 197-223. Chap. vii. Designing screw machine cams, p. 224-257. Chap. viii. Operations on single- and multiple-spindle screw machines, p. 258-335.

25. HAMILTON, DOUGLAS THOMAS.
Gages and gaging inspection. N. Y., Industrial press, 1918.
viii [1], 295 p. 23 cm. ES LC

Contents.—Chap. i. Reference standards and measuring machines, p. 1-27. Chap. ii. Limits and tolerances, p. 28-46. Chap. iii. Reference, working and inspection gages, p. 47-88. Chap. iv. Profile gages, p. 89-105. Chap. v. Indicating gages, p. 106-107. Chap. vi. Gaging and inspecting screw threads, p. 198-253. Chap. vii. Gaging and inspecting gears, p. 254-283.

26. HARTNESS, JAMES.

Hartness flat turret lathe manual. A handbook for operators. Springfield, Vt., Jones & Lamson machine co., 1914.

ES 20785 LC(TJ1218 H36, 1914)

"Die-cut screw threads," p. 134-135.

27. HOLTZAPFFEL, CHARLES.

Turning and mechanical manipulation. Intended as a work of general reference and practical instruction on the lathe and the various mechanical pursuits followed by amateurs. Lond., 1850-56.

3 vols., illus., diars. 23cm. ES 6679-81 LC (TT145 H7)

v. 2, Chap. xxvi. Screw-cutting tools, p. 577-655.—Section ix. Screw threads considered in respect to their proportions, forms, and general character, p. 655-681.

27a Machinery's Screw Thread Book.

Compiled and edited by C. Edgar Allen. . . . Price, 2s 6d net. Lond., The Machinery pub. co., ltd. [1918?].

63 p. incl. illus., diagrs., tables, 22cm. Bur. St.

A very convenient reference book giving the standard screw thread systems employed in Great Britain, America and on the European continent, as well as some standards of large concerns in England, never published before.

28. MANVILLE, THE E. J., MACHINE CO., Waterbury, Conn.

The art of screw thread rolling. Notes on its origin, development, scope and practical utility, with comparative tables and illustrations. . . . Waterbury, Conn. The E. J. Manville machine co. [c1905].

1 p. l., [5]-24 p. illus., tables, diagrs. 23cm. LC. (TJ. 1222, M29.)

29. THE NATIONAL PHYSICAL LABORATORY [Teddington].

Notes on screw gauges. Teddington, Eng., printed and published by W. F. Parrott, The Causeway [1916].

28 p. incl. diagrs., sections, tables. 33cm. Bur. St.

Enlarged issue i. Feb., 1916, price 1s. 6d.

Contents: Notes on the production and testing of screw gauges.—i. The need for accuracy in a gauge.—2 Verification of screw gauges.—3. Errors of screws.—4. Measurement of the diameters of plug screws.—5. Notes on tools.—6. Measurements of ring screw gauges.—7. Measurements at the lathe.—8. Pitch.—9. Measurement of angle of plug screws.—10. Measurements of effective diameter and angle by cylinders of other than "best" diameters.—11. Date for effective and core diameter measurements.—12. Use of a reference groove and cylinder for effective and core diameter measurements.

30. REULEAUX, FRANZ.

The constructor, a handbook of machine design. Authorized trans., complete and unabridged from the 4th enl. German ed., by H. H. Suplee. Phila., H. H. Suplee, 1893.

xviii, 312 p. front. (port.), illus. 31cm. LC. (TJ230, R.46.)

Chapter iv was reprinted in: Mechanics, Phila., Sept.-Oct., 1890. LC. (TA1E595, 1890.)

Chapter iv: Bolts and screws. §73. Geometrical construction of the screw thread. §74. Dimensions of V screw threads. §75. The Whitworth screw system. Whitworth pipe thread scale, p. 214-218.—§76. Sellers' screw thread system. §77. Metrical screw systems. §78. Metrical screw thread systems: Delisle i, Pfalz-Saarbueck and Delisle ii. §79. New systems. §80. Nuts, washers and bolt heads. §81. Table and proportional scale for metrical bolts and nuts. §82. Weight of round iron. §83. Special forms of bolts. §84.

Wrenches. §85. Nut locks, p. 214-217. (Paging belongs to article reprinted from chapter iv in "Mechanics.")

31. Screw Thread Cutting. . . .
New York city, The Industrial press, c 1909.
40 p. diagrs. 23cm. (Machinery's reference series .. no. 32.)
Contents.—Introduction.—Change gears for thread cutting, by E. Oberg. —Kinks and suggestions in thread cutting.—Tables and formulas for making thread tools, by A. L. Valentine, E. Oberg, and J. M. Stabel.
LC. (TJ. 1222. S3.)

32. Screw Thread Tools and Gages. . . .
New York, The Industrial press, c 1909.
42 p. diagrs. 23cm. (Machinery's reference series .. no. 31.)
Contents.—Screw thread systems, by E. Oberg.—Making thread tools, by E. A. Johnson.—Tools for accurate thread cutting, by J. M. Stabel.—Making thread gages, by A. L. Monrad.—Measuring screw thread diameters, by W. Cantelo. LC. (TJ. 1222. S34.)

32a Society of Automotive Engineers., N. Y.
Screw-thread, bolt and nut standards. N. Y., Society, 1918.
14 l. (4 mimeographed), incl. diagrs., tables. 22cm. Bur. St.
Preamble signed Sept. 26, 1918.

33. [Society of Automotive Engineers., N. Y.]
Standards and data sheets. [N. Y., Society, 1917.]
Loose sheets in loose leaf binding covers. 2 vols. 19cm.
LC. (TL. 151, S6.)
The Acme standard thread. Comparison of Acme and square threads v. i, 6aa; Constants for finding diameter at bottom of thread v. i, 6b; International (metric system) standard 60 c thread v. i, 6c; Screws and bolts. S. A. E. standard v. i, 4; 4a; S. A. E. Large diameter thread standard v. i, 4c; Screws and bolts. (J. A. Anglada and E. H. Ehrman v. i, 4b; Spark-plug shells. S. A. E. standards v. i, 3; U. S. Standard bolts, nuts and washers, (Anglada) v. i, 6; Whitworth standard thread v. i, 6a; Drill sizes for standard threads v. i, 6d; Standardization of pipe thread gages (Machinery), v. ii, 40a.
For further details consult index (revised to May, 1917,) in front of vols., under—under headings "Screws," "Thread."

34. U. S. Bureau of Steam Engineering.
Report of the board to recommend a standard gauge for bolts, nuts, and screw-threads for the United States Navy. May, 1868. Wash., Govt. Print. Off., 1880.
30 p. 19 plates (2 fold.) iv tables. 24cm. LC. (TJ. 1340, U5.)

35. U. S. Bureau of Supplies and Accounts (Navy Dept.).
Specifications for machine screw. Jan. 23, 1897. Wash., Govt. Print. Off., 1897.
1 p. 24cm.

36. U. S. Congress. House. Committee on Coinage, Weights and Measures.
Hearing . . . "to provide for the appointment of a commission to standardize screw-thread tolerances," on H. R. 29292. Jan. 27, 1917; Feb. 5, 1917. Wash., Govt. Print. Off., 1917.
Cover-title, 29 p. 23cm. (House of Representatives. 64th Cong., 2d sess.)
ES. 25105. LC. (TJ. 1340, U5, 1917.)

Contents.—Statement of Hon. J. Q. Tilson.—The same of Dr. S. W. Stratton.—The same, of Mr. Frank O. Wells.—The same, of Mr. E. H. Ehrman.—The same, of Mr. Coker F. Clarkson.—The same, of Mr. Earl Wheeler.—The same, of Dr. Stratton.—The same, of Capt. William Strother Smith, U. S. N.—The same, of Horace K. Jones.—The same, of F. O. Wells.

[Appended] Notes on screw gauges. By Col. R. E. B. Crompton, past president, Institution of Automobile Engineers, p. 20-27.

Contents.—Nomenclature.—A short history.—Intoduction to the Whitworth thread.—Introduction of the B. A. System.—Discovery that the Whitworth system itself was not really interchangeable, and the British Standard Committee formed to consider this matter.—Synopsis of work carried out by the Standards Screw Gauge Committee up to issue of report no. 38.—Difficulties in gauge making—Rounded crests and roots versus flat crests—Gauging—Gauges proposed in report no. 38.—Difficulties experienced in obtaining such gauges in quantity.—Issue by National Physical Laboratory of several papers dealing with the gauge difficulty.—Tolerances on screwed work must include allowances.—Effects of excessive tolerance on strength.—Effect of clearances.—Adoption of high-crested taps.—Division of gauges into two classes.—Means by which wear of gauges can be met.—Gauging nuts.—Angle and forms of thread.

37. U. S. CONGRESS. HOUSE. COMMITTEE ON COINAGE, WEIGHTS AND MEASURES.

Hearings . . . on commission to standardize screw threads. 65th Cong., 2d sess., on H. R. 10472. March 5, 7, 1918. Wash., Govt. Print. Off., 1918.

ES 25104 LC(TJ134OU5, 1918)

25 p. 23cm.

Hon. William A. Ashbrook, Chairman of committee.

Contents.—Statement of Hon. Loren E. Wheeler— . . . of Hon. John Q. Tilson— . . . of Mr. John G. Utz— . . . of Rear Admiral W. Strother Smith, U. S. N.— . . . of Dr. S. W. Stratton— . . . of Mr. F. O. Wells— . . . of Mr. Herbert Chase.

Appended: U. S. 65th Cong. 2d sess. House.

Report no. 407: Commission to standardize screw threads. Mr. Goodall, from Committee on Coinage, Weights, and Measures, submitted . . . report [to accompany H. R. 10852.] 2 pages. 23cm.

38. VAN DERVOORT, WM. H.

Modern machine shop tools. N. Y., N. W. Henley pub. co., 1903.

ES 2096 LC(TJ1185, V24)

Screw threads, p. 88, 127, 125, 128, 129.

39. WHITWORTH, SIR JOSEPH, 1st bart.

Miscellaneous papers on mechanical subjects. By Jos. Whitworth, F. R. S. Lond., Longman, Brown, Green, Longmans, and Roberts [etc., etc.], 1858.

viii, 183, [1] p. 2 col. plates 22cm. LC. (T7, W62.)

Contents.—A paper on plane metallic surfaces or true planes.—A paper on an uniform system of screw threads.—Address delivered to the Institution of mechanical engineers, Glasgow, 1856.—A paper on standard decimal measures of length.—Rifled fire-arms.—

Appendix: New York industrial exhibition, 1853. Official report.

40. WHITWORTH, SIR JOSEPH, 1st bart.

Appendix to miscellaneous papers on mechanical subjects: Guns and steel. [Manchester, 1873.]

Caption-title, 43, iii p. illus. 25cm. (At head: For private circulation.) Signed at end of paper: Joseph Whitworth & Co., Manchester, 1873.

LC. (T7, W62.)

Contents.—Principles of rifling guns.—Special committee on rifled cannon.—Report of trials on penetration.—Penetration of armour plating in 1858.—Report on 7-in. wrought iron guns, rifled on various systems.—The report of the

special Armstrong and Whitworth committee.—Correspondence relating to 7 and 8-in. guns.—Correspondence with Sir John Pakington.—Correspondence relating to the Whitworth metal—Correspondence on the subject of field guns for the Indian service.—Report on the trials of a 9-in. Whitworth rifled gun. Correspondence relating to a 12-in. gun.—Report on Sir J. Whitworths' Works at Manchester.

B. PERIODICALS.

SOCIETY PAPERS, AND OTHER SERIAL PUBLICATIONS.

40b Allowances and Tolerances.
(Mach.), v. xxi, no. 6. Feb., 1915. p. 486. 350 words. LC(TJ1 M21, v. 21)

41. [American Railway Master Mechanics' Association.
Screw threads. Standards adopted by Am. Railway Master Mechanics' Assoc'n (Am. Ry. M. M. A.) v. xxxiii, 1900, p. 371-381. 19 figs (diagrs., etc.), 4 tables. ES 25100

42. [American Railway Master Mechanics' Association.]
Standards and recommended practice. (Am. Ry. M. M. A.), v. 47, part 1, 1914, p. 463-466. Diagrs., sections, tables. ES 25101
Screw threads, bolt heads and nuts. Standard, p. 463-466.
Proportions for Sellers' standard nuts and bolts.

43. [American Railway Master Mechanics' Association.]
Report of committee on dimensions for flange and screw couplings for injectors. (Am. Ry. M. M. A.), v. xlviii, 1915, p. 420-438. With discussion, incl. 22 sections, 4 tables, 1 fold. plate (sections). LC. (TF 1, A5, v. 48.)
Discussion, p. 432-438.
Committee: M. H. Haig, chairman; members: T. F. Barton, S. B. Andrews, W. H. Winterrowd, B. F. Kuhn.
Contents.—Form and dimensions of thread.—Dimensions of coupling nuts and sleeves.—Application of coupling sleeves.—Dimensions of flange couplings.—Opinions on brazed and mechanical joints.—Comments on flange connection as compared with spanner nut.—Material in coupling nuts and sleeves.—Reinforced spanner nuts.—Spelter.—Brazing.—Brazing by oxy-acetylene process.—Material in injector pipes.—Application of injector equipment.—Lever starting valve support.—Use of standards.

44. American Railway Master Mechanics' Association.
Report of the Committee on dimensions for flange and screw couplings for injectors. (Am. Ry. M. M. A.), v. xlix, 1916, p. 63-70. LC. (TF 1, A5, v. 49.)
Committee: M. H. Haig, chairman; members: T. F. Barton, W. H. Winterrowd, B. F. Kuhn, S. B. Andrews, M. D. Franey, J. C. Mengel.

45. American Railway Master Mechanics' Association.
Forty-ninth annual convention. (Ry. R.), v. 58, No. 26, June 24, 1916, p. 923-940. Port. ES.
Port.: William Schlafge, president of the association.
Standardization of screw threads, p. 926-927. (Being an abstract of a paper read by F. O. Wells, of the Greenfield Tap & Die corporation). 1 table.

46. [American Society for Testing Materials.]
Report of Committee E-3 on Revision of pipe threads. (Am. Soc. T. M.), v. xvii, part i, 1917, p. 504-507. ES. 24942. LC. (TA401 A5, v. 17-1.)
H. V. Willie, chairman of committee.

The above committee was forming part of a joint committee on this subject with committees of the following societies: Am. Gas Institute; Am. Society of Mech. Engineers; Manufacturer's Association on Standardization of Fittings; Master Car Builders' Association; Railway Signal Association.

46a. [AMERICAN SOCIETY OF MECHANICAL ENGINEERS, N. Y.]
Adjustable tolerances for bolts, nuts, screws and taps. (Iron Age), v. xcv, no. 6. Feb. 11, 1915, p. 377. LC. (T1 I7, v. 95.)

"A conference looking to the settlement of the tolerances which should be allowed in the departure from exact standard size of bolts, nuts, screws and taps was held at the rooms of the Am. Society of Mechanical Engineers in New York city, on Friday morning, Feb. 5th."

Question before the meeting was "Screw thread fits for products one-fourth inch, to 2 inch. diam.," one that had been under consideration for several years. Letters were propounded and answered, on allowable departure from U. S. Standard pitch diameter, root diameter, outside diameter, lead of thread, and angle of thread.

46b. [AMERICAN SOCIETY OF MECHANICAL ENGINEERS, N. Y.]
Commission to standardize screw threads. (Am. Soc. M. E.) Journal, v. 40, no. 10. Oct., 1918, p. 875. 310 words.

ES. LC. (TJ1, A72, v. 40.)

Deals with the preliminary work of the newly created screw thread commission which will make its headquarters at the Bureau of Standards, Washington, D. C.

47. [AMERICAN SOCIETY OF MECHANICAL ENGINEERS, N. Y.]
Report of A. S. M. E. Committee on limits and tolerance in screw thread fits. (Am. Mach.), v. 48, no. 22, May 30, 1918, p. 913-926, incl. 18 figs. (diagrs., sections, etc.), tables 1-20, and formulas.

ES. LC. (TJ1, A7, v. 48.)

This report is the result of a comprehensive investigation by the committee on limits and tolerances in screw thread fits, of the A. S. M. E., and was presented to the Society at Worcester, Mass., June 4-7, 1918.

An excerpt of the above in: (Mach.), v. 24, July, 1918, p. 1061-1062.

47a. [AMERICAN SOCIETY OF MECHANICAL ENGINEERS, N. Y.]
Report of the Committee on standardization of flanges and pipe fittings. (Am. Soc. M. E.) Journal, v. 40, no. 10. Oct., 1918, p. 850-852, incl. 2 figs., tables 1-4. ES. LC. (TJ1, A72, v. 40.)

Committee: Arthur R. Bayliss, acting chairman. Members: Stanley G. Flagg, jr., E. M. Herr, Arthur M. Houser, Julian Kennedy, E. A. Stillman, A. S. Vogt, R. M. White.

The committee has agreed on additions to existing standards comprised in its report known as the American standard for pipe flanges, fittings and their bolting, issued in 1914.

The above paper was prepared under direction of J. P. Sparrow, deceased, the late chairman of the committee.

48. [AMERICAN SOCIETY OF MECHANICAL ENGINEERS, N. Y.]
Report of the Committee on standardization of special threads for fixtures and fittings. Rolled threads for screw shells of electric sockets and lamp bases. Papers no. 1474. (Am. Soc. M. E.), v. 37, 1915, p. [25]-29, incl. 4 figs., tables.

ES. 23670. LC. (TJ1, A7, v. 37.)

Received by the council, A. S. M. E., Feb. 13, 1915, and ordered printed. Presented at the spring meeting, Buffalo, June, 1915, of the A. S. M. E.

Committee: Edw. S. Sanderson, chairman. Members: Wm. J. Baldwin, Stanley G. Flagg, jr., C. R Hare, H. E. Harris, A. H. Moore, W. R. Webster, Geo. B. Thomas, secretary.

49. [AMERICAN SOCIETY OF MECHANICAL ENGINEERS, N. Y.]
Standardization of pipe thread gages. Paper no. 1399. (Am. Soc. M. E.), v. 35, 1913, p. 309-311. 1 fig., 1 table.
ES. 21805. LC. (TJ1, A7, v. 35.)

Fig. 1 view of plug and ring gage.

Report of a committee on the above subject presented at annual meeting, 1913. E. D. Meier, chairman of committee.

50. [AMERICAN SOCIETY OF MECHANICAL ENGINEERS, N. Y.]
Standardization of threads of sockets and lamp bases. (Elec. W.), v. 67, no. 5, Jan. 29, 1916, p. 260. 1 fig., 1 table.
ES. LC. (TK1E5, v. 67.)

Recommendations of Am. Soc. Mech. Engineers on design of screw-shell lamp threads for lamp bases, fuse plugs, attachment plugs and the like.

See also under title: Rolled threads for screw shells.

51. [AMERICAN SOCIETY OF MECHANICAL ENGINEERS, N. Y.]
Standard proportions for machine screws. Revised report of the Committee on Standard proportions for machine screws. Paper no. 1142. (Am. Soc. M. E.), v. 29, 1907, p. [99]-113, 2,500 words, incl., table no. 1-14; 1-2. 1 fold. plate (diagr.)
ES. 12238. LC. (TJ1, A7, v. 29.)

Committee: Wilfred Lewis, chairman. Members: Chas. C. Tyler, Horace K. Jones, John Riddell, Geo. R. Stetson, Geo. M. Bond.

History of committee, p. 114.—Automobile Association standard bolts and nuts, p. 119.—(Material, tolerance, p. 120.) (Length of threaded portion, p. 121).

52. [AMERICAN SOCIETY OF MECHANICAL ENGINEERS, N. Y.]
Standard threads for hose couplings. Report of Sub-committee on fire protection. Paper no. 1398. (Am. Soc. M. E.), v. 35, 1913, p. 301-307, 4 figs. ES. 21805. LC. (TJ1, A7. v. 35.)

Presented at annual meeting, 1913. John R. Freeman, chairman of committee.

53. ANDERSON, C.
Using taper wedges in cutting square threads. (Mach.), v. xxiv, March, 1918, p. 644-645, incl. 2 figs. (diagrs.)
ES. Pam. LC. (TJ1, M2, v. 24.)

54. ANDERSON, W. S.
Tools for turning and threading small screws. (Ry. Mech. E.), v. 91, no. 4. April, 1917, p. 211-212. 280 words, incl. 2 figs. (diagrs., etc.)
LC. (TF1A3,v.91)

Illustrations: [1] Holder for the threading die. [2] Tool holder for turning the body of the screw.

Author describes a tool holder which has been developed for making a one-half inch brass cap screw.

55. THE ARMSTRONG PIPE THREADING MACHINE.
(Iron Age), v. lix, April 15, 1897, p. 9. 1 illus.
LC. (T1, I7, v. 49, 1897.)

Short note, describing machine.

56. ATKINSON, ROBERT E.

Standardization of pipe flanges and flanged fittings. (Inst. Mech. E.), no. 2, March-May, 1902, p. 303-371. With discussion. 98 figs. (diagrs., sections, etc.), plates no. 27-40, tables i-xiv. LC. (TJ1I5, 1902.)

Appendix, being portion of a communication sent to the institution by Messrs. Lloyd and Lloyd, Albion Tube Works, Birmingham.

57. ATKINSON, ROBERT E.

Standardization of pipe flanges and flanged fittings. (P. Eng.), v. 25, no. 797, June 6, 1902, p. 533-536; no. 798, June 13, 1902, p. 559-561; no. 799, June 20, 1902, p. 588-591; no 800, June 27, 1902, p. 615-618. 95 outline figs., table i-xiii. LC. (TJ1, P8, v. 25, 1902.)

Paper read before the Institution of Mech. Engineers, London, April 18, 1902.

Tables show standard flanges used by various firms.

Appendix: Being a portion of a communication sent to the institution by Messrs. Lloyd & Lloyd, Albion Tube Works, Birmingham, Eng.

See also: Editorial, ibid., no. 791, April 25, 1902, p. 385-386, and editorial, ibid., v. 25, no. 800, June 27, 1902, p. 601-602.

58. AUBRY, PAUL.

Filetages système français. Par Paul Aubry, Ingénieur des arts et manufactures. (Rev. Tech.), 17e année, t. xvii, no. 9, 10 mai, 1896, incl. 10 figs. (illus., diagrs., etc.) P. O.

59. AUBRY, PAUL.

The French system of screw threads. (Inst. Civ. E.), v. cxxvi, 1896, p. 468-469. ES. 9411. LC. (TA1, I6, v. 126.)

An abstract of a paper in: La Revue Technique, 1896, p. 194.

The original article has 10 figs.

60. BACON, S. NEVIN.

Knurling in the screw machine. (Am. Mach.), v. xxxvi, Feb. 8, 1912, p. 235-236, incl. 13 figs. (sections, etc.) ES. LC. (TJ1, A5, v. 36.)

Article describes knurl-holders for use on the cross-slide of an automatic for various kinds of work, in detail.

61. BACON S. NEVIN.

Knurling tools for screw machines. (Am. Mach.), v. xxxvi, Feb. 22, 1912, p. 295-296, incl. 9 figs. (sections, etc.)

ES. LC. (TJ1, A5, v. 36.)

Author describes a variety of special tools for knurling in the automatic screw machine not commonly seen in regular practice.

See also letter by author in: v. xxxvii, no. 2. July 11, 1912, p. 74. 270 words.

62. BEALE, OSCAR J.

Lead and pitch of a screw—What they are. (Am. Mach.), v. xxx, part 2, July 18, 1907, p. 90-91; 4 figs., (sections). ES. LC. (TJ1, A5, v. 30-2.)

Explains terms used by the firm Brown & Sharpe co.

63. Berechnung von räder-getrieben zum gewindeschneiden. (Zeit. Werkz.), Mai 15, 1912. 3000 words. Illus.

Calculations for wheel motion in screw-cutting.

Contains tables and formulas for determining wheel ratios in screw sizes.

63. Bericht ueber die frage der schluesselweiten zum neuen metrischen gewinde-systems. (Z. O. I. A.), li. Jahrg., no. 43. 27 oct., 1899; p. 601-602; 1,800 words; 1 diagr.; 2 tables; 1 formula.

LC. (TA3, O3, v. 51.)

This is an appendix to a report of the conference held at Zurich in 1898, discussing in particular the width between opposite flat faces of nuts and bolt heads.

"Anhang. Beschreibung des internationalen gewindesystems. S. I.," p. 602.

65. BERRIER-FONTAINE.

De l'adoption d'une série régulière de filetages pour les vis horologères par M. Berrier-Fontaine, Directeur du génie maritime. (S. E. I. N.), 103e année, 1er sémestre, t. 106, no. 2. février, 1904; p. 154-158.

LC. (T2, S6, v. 106.)

Extrait du Mémorial du génie maritime de décembre, 1903.

66. BESSOM, EDWARD J.

An unusual screw. (Mach.), v. 24, no. 5, Jan., 1918, p. 446. 240 words, incl. 2 figs. (half-tone diagrs.) LC. (TJ1, M21, v. 24.)

66a. BESSOM, EDWARD J.

Bibliography of munition production. (Am. Soc. M. E.), Journal, v. 39, no. 5. May, 1917, p. 386-388. LS. (TJ1, A72, v. 39.)

Contains some material on screw-threads in the manufacture of firearms and ammunition.

67. BICKNELL, THOMAS.

Thread lead indicator. (Mach.), v. xxiii, July, 1917, p. 1025, incl. 3 figs. (half-tones). ES. Pam. LC. (TJ1, M2, v. 23.)

The same in: Iron Age, v. 100, July 5, 1917, p. 1025. LC.(T1 I 7,v.100) and in: Railway Mech. Engineer, N. Y., v. 91, Aug., 1917, p. 463.

68. Bicycle spoke threading machine. (Iron Age), v. lix, Jan. 21, 1897, p. 9; 1 illus. LC. (T1, I7, v. 59.)

69. BILLINGS, J. HARLAND.

Errors in measuring thread pitch diameters with wire. (Am. Mach.), v. 47; no. 25, Dec. 20, 1917, p. 1077-1078, incl. 1 fig. (Diagr.)

ES. Pam. ES. LC. (TJ1, A5, v. 47.)

Figure shows "How the error is multiplied."

70. Bolt cutting and nut tapping machine. (Am. Mach.), v. 27, no. 29, June 21, 1904, p. 977, 150 words, 1 half-tone.

LC. (TJ1, A5, v. 27.)

70a. BODE, J. C. P.

Methods of expressing tolerances. (Mach.), v. 25, no. 1, Sept., 1918, p. 85; 480 words.

71. Breech-blocks, (Eng.), v. lxxxvii, Feb. 12, 1909, p. 220-221, 3 figs. (sections). ES. 15330. LC. (TA1, E55, v. 87.)

Deals with the modern form of the screw breech-block.

72. BRIGGS, ROBERT.

A uniform system of screw threads. (Frank. I.), v. 79, 1865; p. 111-125, incl. 3 tables, plate iii (fold.), figs. i-v, diagrs., etc.).

ES. 11431.

At head of title: "For the Journal of the Franklin Inst."

72a. BRIGGS, ROBERT.

American practice in warming buildings by steam. Paper 1823. (Inst. Civ. E.), v. lxxi, 1883; p. 95-175, incl. 15 figs., tables i-xiv.

ES. 9357. LC. (TA1, I6, v. 71.)

Appendix, p. 124-138.
Discussion, p. 139-162.
Correspondence, p. 163-175.
"Wrought-iron welded tubes," p. 96, treats on taper screw-threads for tube connections.

73. BRITISH ASSOCIATION SMALL SCREW GAUGE COMMITTEE.

(Mech. Eng.), v. 13, no. 323, April 2, 1904, p. 497-500, 2,000 words, 5 figs., 4 tables. LC. (TJ1, M4, v. 13.)

This is a brief history of the labors of the above committee, and a final report of investigations and results.
The committee consisted of: R. E. Crompton, J. M. Gorham, G. K. Elphinstone, Mark Barr, C. V. Boys, O. P. Clements, and W. A. Price.

74. BROOKER, ARTHUR.

Measurement of screw threads. (Sci. Am. S.), v. lxxxv, no. 2196, Feb. 2, 1918, p. 71. ES. LC. (T1, F52, v. 85.)

From Engineering Supplement, London Times.
This is an abstract of the author's paper read before the Liverpool Engineering Society.

75. BROOKER, ARTHUR.

Screw thread measurement. (Eng.), v. ciii, no. 2666, Feb. 2, 1917, p. 113-116; no. 2667, Feb. 9, 1917, p. 139-141; no. 2668, Feb. 16, p. 165-166. Figs. 1-28, (half-tones, diagrs., sections, etc.), formulas.

ES. LC. (TA1, E55, v. 103.)

Contents: Section i. Introduction.—Section ii. Definitions, p. 113.—Section III. Methods of measurement. 1. Measurement of elements by microscope micrometer, p. 114-116.—2. Diametrical measurements by floating micrometer, p. 139.—3. Optical projection apparatus.—4. Measurement of pitch by mechanical means, p. 165. Section iv. Concluding remarks, p. 165-166.
This paper was read before the Liverpool Engineering Society.
Deals with the Whitworth standard system, and with the methods of measurement.
See also Cambridge Scientific Instrument co., title no. 79.

75a. BROPHY, J. P.

Interchangeability, tolerances and finish. (Am. Mach.), v. 48, no. 4. Jan. 24, 1918, p. 156-157. ES. LC. (TJ1, A5, v. 48.)

Contents.—Interchangeability should be considered.—Inspectors play an important part.—Money expended foolishly.
Mr. Brophy is vice president and general manager, Cleveland Automatic Machine co.
He gives his ideas regarding the requirements along the lines of interchangeability, tolerances and finish.

76. BROWN, E. P.

Screw thread standards. (Mach.), v. 19, no. 5. Jan., 1913, p. 372.

LC. (TJ1, M21, v. 19.)

77. BUCKINGHAM, EARLE.

Accuracy vs. precision, and the gage problem. Letter to editor, by

Earle Buckingham, Captain, Ord. Dept., U. S. R., Gage manager, and G. F. Matteson. (Am. Soc. M. E.) Journal, v. 40, no. 2, Feb., 1918, p. 158-160. ES. LC. (TJ1, A72, v. 40.)

77a. BUCKINGHAM, EARLE.

American industrial progress as revealed by war orders. (Am. Mach.), v. 46, no. 8, Feb. 22, 1917, p. 315-321. ES. LC. (TJ1, A5, v. 46.)

Contents.—Difference between American and European manufacturing development.—The opportunity for close comparison of the two systems.—Elementary principles of manufacturing.—Classes of inchangeable manufacture.—Determining allowance variations.—The inspection service and assembling.—Very little interchangeable work turned out in United States.—A serious mistake at the outset.—Disregard of specifications.—Result of slighting preliminary work.—The handicap of unskilled employees.—Inspection was considered a necessary evil.—The rush for gages and need of gage makers.—"American practice" must undergo radical changes.

78. BUCKINGHAM, EARLE.

Calculating change-gears for 4-5 mm. pitch. (Mach.), v. 24, Jan., 1918, p. 448, incl. diagrs. LC. (TJ1, M2, v. 24.)

79. [THE CAMBRIDGE SCIENTIFIC INSTRUMENT CO., CAMBRIDGE, ENG.]

Screw thread measurement. Letter to the editor, dated Feb. 19, 1917, by The Cambridge Scientific Instrument Co., (Horace Darwin, Chairman), Cambridge, Eng. (Eng.), v. ciii, no. 2669, Feb. 23, 1917, p. 186. ES. LC.(TA1E55,v.103)

Refers to paper by A. Brooker, which see, and to an instrument for thread measurement constructed by them.

80. CAMMERER, H.

Beitraege zur schraubenberechnung. Vortrag von H. Cammerer. (V. D. I.), band xxxxiv. 2 halbjahr. 11. Aug., 1900, p. 1063-1065, 2,000 words, 8 figs. LC. (TA3, V5, v. 44-2.)

This is a lecture under the title: "Notes on the computation of screw threads."

It shows, by the aid of diagrams, the various stresses and formulas for computation, including the influence of torsion.

81. Camming Automatic Screw Machines (Ry. Mach.). Feb., 1903, p. 185-188, incl. 8 figs. (sections). P.O.

Sub-title: Explanation of principle, and demonstration.

82. CANTELO, WALTER.

Measuring external screw thread diameters. (Am. Mach.), v. xxvi, no. 26, June 25, 1903, p. 904-906. 1200 words. 7 outline figs., 2 tables. LC (TJ1 A5,v.26,1903)

Tables.—i. Constants for measuring U. S. Standard, V, and Whitworth threads. ii. Constants for Acme standard threads.

Author furnishes formulas, etc., so that the standard threads can be compared with the figures given in his table by the use of ordinary micrometer calipers.

83. CARTER, ALFRED E.

Indicator used for cutting internal threads. (Mach.), v. xxiv, May, 1918, p. 790. ES—Pam. LC(TJ1M2,v.24)

84. CELLERIER, F.

L'unification des systèmes de filetage. (Tech. M.), Dec., 1910. 6000 words. Illus. E.

Author gives an outline of the status of a movement to standardize the the systems of screw-threads.

84a. CHUBB, I. W.

The British 6-in. howitzer. iii. Body and breech mechanism. (Am. Mach.), v. 49, no. 14, Oct. 3, 1918, p. 605-612, incl. figs. no. 65-80 (half-tones, sections, etc.). ES. LC.(TJ1A5,v.49)

"Internal threads," p. 612.

"Accumulation of errors," p. 612.

85. CHUBB, I. W.

Producing British screw gages. (Am. Mach.), v. 46, no. 14. April 5, 1917, p. 593-594, incl. 3 half-tones, 1 table. ES. LC.(TJ1 A5,v.46.)

Illustrations: 1. The V tool. 2. The tool under the microscope. 3. Testing pitch diameter.

Table: Solid threaded plug.

Notes of author on screw gages made by the British firms E. G. Wrighley & co., ltd., Soho, Birmingham, and others, and their methods of manufacture.

86. CLARK, J. J.

Finding angle of special screw thread. (Mach.), v. 24, July, 1918, p. 1043. 250 words, incl. 1 diagr. ES.—Pam. LC.(TJ1 M2,v.24)

87. CLEMENTS, O. P.

On screw threads used in cycle construction, and for screws subject to vibration. (Engi.), v. xc, Sept. 21, 1900, p. 302. 1200 words, 4 figs. (sections), 1 table ES. 11012 LC.(TA1 E5,v. 90)

Read before Section G, British Association, Sept. 11, 1900.

Treats on the shape of threads.

Figures give sections of B. S. A., British Association, Sellers and Whitworth threads.

88. CLOUGH, FRANCIS W.

United States standard thread tool gage. (Mach.), v. 20, no. 5, Jan., 1914, p. 404. 600 words, incl. 1 ouline cut. ES.—Pam. LC.(TJ1M2,v.20)

89. COBURN, F. G.

Everyday screw thread troubles. (Am. Mach.), v. 36, no. 23, June 6, 1912, p. 908-909. Figs. 1, 2. ES. LC.(TJ1 A5,v.36)

Author is asst. naval constructor, U. S. Navy.

Troubles which have come up in securing satisfactory results with the fitting of threaded parts, and suggestions for remedying the defects.

90. COLBURN, GEORGE L.

A screw-thread angle-table. (Am. Mach.), v. 27, no. 23, June 9, 1904, p. 758. 500 words, 1 table. LC.(TJ1 A5,v.27)

Table gives the angle of helixes of various pitches and diameters with respect to a line perpendicular to the axis, with explanatory notes.

91. COMMISSION INTERNATIONAL D'UNIFICATION DES FILETAGES.

Réunion à Zurich, 1900. Système international des filetages à base métrique. Overture de clefs. Circulaire de la Commission international

d'unification des filetages, réunion à Zurich (October, 1900). (S. E. I. N.), 100e année, ler sémestre, t. 101, no. 3, 31 janvier, 1901, p. 129-144. Tables, formulas. LC.(T2S6,v.101,1901)

Signed: Le sécretaire, A. Jegher.

"Règles du système international de filetages. S. I.," p. 130-132.

"Procès-verbal de la Conférence internationale réunie à Zurich le 20 octobre, 1900, pour la fixation des ouvertures de clés, p. 133-134.

"Programme de la conférence pour la fixation des ouvrages de clés du système de filetage international, S. I."

A discussion of the S. I. proposed in the conference of 1898 at Zurich, and of subsequent questions relating to dimensions of keys and wrenches.

91a. COOK, CHARLES A.

Designation of threads. Letter by C. A. Cook, Detroit, Mich. (Mach.), v. 25, no. 1, Sept., 1918, p. 62-63. LC.(TJ1M21,v.25)

92. COYNE, JAMES F.

Measuring and testing taps and screws. (Am. Mach.), v. 47, no. 19, p. 824. 220 words, incl. 2 figs. (diagr., chart).

ES.—Pam. LC.(TJ1A5,v.47)

Illustrations: Fig. 1. Gage for screws. Fig. 2. Tolerance chart for screws.

93. [CROMPTON, R. E. B.]

Screw gages. (Sci. Am. S.), v. lxxxiv, no. 2186, Nov. 24, 1917, p. 333. 780 words. ES. LC.(T1F5,v.84)

From Engineering Supplement of London Times.

Abstract of some notes on screw gages, presented by Col. Crompton to the Institution of Automobile Engineers, London.

94. CROMPTON, COLONEL R. E.

Screws and gauges. (Horseless A.), v. 39, no. 5, March 1, 1917, engineering section, p. 9-10. LC.(TL1 H81,v.39)

Sub-title: Definitions of terms used in accurate screw work.—Number and types of gauges required.—Difficulty in making the gauges.

"Effect of excessive tolerance on strength," p. 10.

"Gauging nuts," p. 10.

Article reviews report of the National Physical Laboratory made in Sept., 1916, on screw gauges, and on paper read by Col. Crompton before the Institution of Automobile Engineers, London.

Abstract of above in: (Am. Soc. M. E.), v. 39, no. 4. April, 1917, p. 351. ES. LC. (TJ1A72, v. 39.)

95. Cutting Lead Screws with Bolt Dies.

(Mach.), v. 23, Jan., 1917, p. 404. 800 words.

ES.—Pam. LC.(TJ1M2,v.23)

96. Cutting Multiple Threads.

(Mach.), v. 24, no 1, Sept., 1917, p. 56. 330 words. LC.(TJ1M21,v.24)

97. Cutting Screw Threads. (Editorial.)

(Mach.), v. 24, no. 2, Oct., 1917, p. 116. LC.(TJ1M21,v.24)

98. DAVIS, W. H.

Cutting multiple thread screw in the lathe. (Mech. W.), v. li, no. 1307, Jan. 19, 1912, p. 26-27. 1500 words, incl. 5 figs. (sections).

LC.(TJ1M55,v.51)

99. De Leeuw, A. L.
Cutting square threaded screws. (Am. Mach.), v. xxiv, part ii, no. 24, Oct. 17, 1901, p. 1160-1162. 5 outline figs. LC.(TJ1A5,v.24-2)
Illustrations: A square thread, its tool and its nut.

100. Dimensions of standard metric machine screws.
(Am. Mach.), v. 47, no. 10, Sept. 6, 1917, p. 422, incl. formulas, chart; no. 16, Oct. 18, 1917, p. 694, incl. diagrs., formulas.
ES. LC.(TJ1A5,v.47)
Extract from "Zeitschrift für instrumentenkunde." Translated.
Illustrations: Forms and dimensions of metric machine screws.

101. Donaldson, H. F.
Interchangeability and methods of securing it in screw threads. Lecture by H. F. Donaldson. (Inst. Mech. E.), parts 1-2, 1909, p. 253-292. 26 figs. LC.(TJ1 I5,pts.1-2,1909)

102. Donaldson, H. F.
Interchangeability and methods of securing it in screw threads. (Eng.), v. cvii, Feb. 12, 1909, p. 170-171; Feb. 19, 1909, p. 201-202. 15 figs. half-tones, diagrs., sections, etc.). ES. 15326 LC.(TA1E5,v.107)
Lecture at graduates' meeting, Feb. 8, 1909, of the Inst. of Mech. Engineers, London.
The same article in: (Engi.), v. 87, Feb. 12, 1909, p. 212-213; Feb. 19, 1909, p. 261-286. 44 figs. (diagrs., sections, etc.)
ES. 15330. LC.(TA1,E55,v.87)

103. Doorakkers, G.
The manufacture of hardened thread gauges. i. (Engi.), v. cxxiv, no. 3222, Sept. 28, 1917, p. 263-265. 2000 words. Figs. 1-10B, formulas.
ES. LC.(TA1,E5,v.124)
Deals with a way of checking mechanically, which compares favorably with the optical way.

104. Ehrman, Edwin H.
Screw thread situation in Great Britain and America. (Soc. Autom. E.), Journal, v. iii, no. 2, Aug., 1918, p. 122-131. Figs. 1-8 (diagrs., sections, etc.), formulas. ES. LC.(TL1 A6,v.3)
Contents.—Profiles not arbitrary.—Comparisons of thread profile.—Tolerance on the roots.—Ease of production.—Influence in manufacturing.—Use of fine pitches.—Disposition of limits.—Tolerances and allowances.—Effect of lead (or pitch) errors.—Effect of error of angle.—Application of gages.—Gale tolerances and limits.—Author's conclusion.
Author is secretary and factory manaegr of the Chicago Screw co.

105. Ehrman, Edwin H.
Screws. (Ry. Mach.), Sept., 1903, p. 565-567, incl. figs. 1-4 (diagrs.). Patent Off. Lib.
Extract from article in "The Michigan Technic."
Shows U. S. standard.—V standard.—Whitworth standard.—International standard.—British Association standard.—Acme standard threads.

106. Eisler, Charles.
Cutting double threads in one operation. (Am. Mach.), v. 48, no. 19, May 9, 1918, p. 803-804. 110 words. 2 outline cuts.
ES. LC.(TJ1 A6,v.48)

Illustrations: Figs. 1, 2. Tools for outside and inside threads.
Describes tool used by author for some time for cutting double threads.

107. The Elimination of the V-Thread.

(Iron Age), v. lxxxiii, no. 8, Feb. 25, 1909, p. 644-645. 1800 words. 1 table. LC.(T 1 I 7,v.83)

Sub-title: Tap and die makers adopt the U. S. standard.
Contents.—The V-thread standard no standard.—Difference in diameter.—Impracticability of the V-standard.—Two possible courses.—Recognition of the advantages of the U. S. standard.

108. ELLIS, M. E.

Adaptability of universal drill jigs. (Am. Mach.), v. xxxvii, no. 18, Oct. 31, 1912, p. 729-730, incl. 8 figs (half-tones and sections).

ES. LC.(TJ1 A5,v.37)

On the use of universal jigs in the production of accurate and interchangeable work. Types of jigs that have proved satisfactory in this respect, and their varied uses.

109. ELLIS, M. E.

Standardization of special tools. (Am. Mach.), v. xxx, pt. i, June 6, 1907, p. 800-802, incl. 14 figs. (sections, half-tones, charts, etc.) 1 table.

ES. 9675 LC.(TJ1A5,v.30-1)

Fig. 4. Collar-head jig screws.—5. Winged jib screws.—6. Square-head jig screws.—7. Headless jig screws.—8. Nurled-head jig screws.—9. Same as 8.—10. Locking jig screws.

110. ELMER, ARTHUR D.

Merits of Cadillac form of thread. (Am. Mach.), v. xxxiv, Feb. 2, 1911, p. 211-214. 2500 words. 5 figs., 3 tables. LC.(TJ1 A5,v.34,1911)

This article explains the form of thread adopted by the Cadillac Car Co., and author compares it with other forms, and its advantage over them.

111. EMERY, A. H., JR.

Cutting testing machine screws. (Am. Mach.), v. xxxvii, no. 8, Aug. 29, 1912, p. 335-336, incl. 4 figs. (half-tones), 1 table.

ES. LC.(TJ1 A5,v.37)

"These screws are 12-in. in diameter by 50 ft. long, with an Acme thread of 1½ in. pitch cut for a distance of 30 ft. from one end."
"The errors in the cutting of the thread were measured by means of a special gage and corrected by a novel fixture applied directly to the thread."

111a. ERDMAN, A. W.

Limits and tolerances for the manufacture of munitions. (Am. Soc. M. E.), Journal, v. 39, no. 5, May, 1917, p. 382-384.

ES. LC.(TJ1 A72,v.39)

This is an abstract of a paper for presentation at the spring meeting, Cincinnati, O., May 21-24, 1917, of the American Society of Mechanical Engineers.
See also fuller entry under no. 111b.
Also in: (Iron Age), v. 99. May 10, 1917, p. 1137-1138; (Iron Trade Review, Cleveland, O.), v. 60, May 24, 1917, p. 1130, the latter being condensed.

111b. [ERDMAN, A. W.]

Limits and tolerances for the manufacture of munitions. (Am. Mach.), v. 47, no. 2, July 12, 1917, p. 73-74. ES. LC.(TJ1A5,v.47)

Contents.—Relation of tolerances to weight.—Thread tolerances—Individual judgment of inspectors—Machine-tool limitations—Maximum production the real aim of any revisions.

From a paper read by Mr. Erdman, of the General Electric Co., at the spring meeting of the A. S. M. E., Cincinnati, O., May 21-24, 1917. . . . "The purpose of this paper is to direct attention to some of the practical aspects of the question of limits and tolerances, as customarily applied to the manufacture of munitions, rather than to attempt to establish standards of high technical value in assigning definite limits to the several classes of dimensions involved." (Quoted from introductory remarks.)

112. Errors in and Limits of Workmanship.

(Am. Mach.), v. xxx, pt. i, Jan. 3, 1907, p. 12-14, incl. 3 figs. (diagrs.), tables 1-2. ES. 8675 LC.(TJ1A5,v.30)

Two comprehensive reports of the British Engineering Standards Committee.

Contents.—Basis of work—Differences between British and American practice—Graphic representation of the measurement.—

Fig. 1. Average errors—Shafts. 2. Average errors—Holes. 3. British standard tolerances and allowances for running fits.

113. Filetages à base métrique (système internationale), 1901.

(Génie C.), v. xxxviii, p. 333. LC. (TA2 G3,v.38)

114. Filetages à la Fraise.

Génie C.), 22e année, v. xl, no. 3, 16 novembre, 1901, p. 49. 420 words, 1 illus., 1 diagr. LC.(TA2 G3,v.40)

Illustration: Machine pour le filetage à la fraise.

From Am. Machinist, Sept. 7, 1901.

115. Fine screw Thread Standards. (Editorial.)

(Mach.), v. 19, no. 1, Sept., 1912, p. 16. TJ1M21,v.19)

Relates to the efforts made to establish a uniform standard system of screw threads in this country.

FONTAINE BERRIER. See BERRIER-FONTAINE.

116. FOSNOT, L. P.

Adjustable female thread gage. (Am. Mach.), v. 47, no. 8, Aug. 23, 1917, p. 339, incl. 2 figs. (sections), 2 tables .40 words.

ES. LC.(TJ1 A5,v.47)

Figures show adjustable female thread gage.

117. FRANCE. COMMISSION DE FILETAGES.

Compte rendu de la séance de la commission en date du 7 mars 1916. Unification des filetages sur tubes. (S. E. I. N.), 115e année, 1er sémestre, t. 125, no. 3, mai-juin, 1916, p. [466]-[467]. 1 table.

LC. (T2 S6,v.125)

Table: Dimensions proposées pour l'unification universelle des filetages sur tubes. Filetages cylindriques—Filetages coniques au 1-16. (Tableau simplifié proposé par la Commission des filetages de la Société d'encouragement.)

Note.—Cette commission est actuellement composé de : M.le général Sebert, président, MM. Carpentier, Toulon, Lieut.-Colonel Paul Renard, Marre et Arnould, membres du Comité des arts èconomiques, MM. Sauvage, Terré, Brocq et Masson, membres du Comité des arts mécaniques.

118. [FRANCE] COMMISSION DES FILETAGES.

Congrès des Associations internationales, Bruxelles, 1910. Rapport sur l'unification des systèmes de filetage presénté au Congrès mondial de

l'Exposition de Bruxelles au nom de la Société d'encouragement pour l'indutrie nationale française, par M. le général Sebert, délégué. (S. E. I. N.), 109e année, 1re sémestre, t. 113, avril, 1910, p. 503-507. 2000 words. LC.(T2S6,v.113)

Report by General H. Sebert of the Screw-thread commission, on a proposition to standardize screw threads. The project was presented at a conference held during an exposition at Brussels under the auspices of the French society for the encouragement of national industries.

119. FRANCE. COMMISSION DES FILETAGES.

Rapport fait par M. Gustave Richard, au nom de la Commission des filetages, sur l'unification des filetages. (S. E. I. N.), 92e année, 4e série, t. viii, avril, 1893, p. 173-178. Dated 10 mars, 1893.

LC.(T2S6,v.92,1893)

120. [FRANCE. COMMISSION DE FILETAGES.]

L'unification des filetages à l'étranger. Compte rendu de la séance du Comité d'action suisse pour l'unification des filetages des jauges tenue à Zurich, le 20 nov., 1897 (S. E. I. N.), 96e année, 5e série, t. iii, no. 2, février, 1889, p. 203-249. LC. (T2, S6, v. 3, 1897.)

121. [FRANCE. COMPAGNE DES CHEMINS DE FER L'OUEST.]

Application des règles du système française de filetage pour les vis mécaniques au matérial de la compagnie de l'ouest. M. Clerault, Ingenieur en chef. (S. E. I. N.), 97e année, 5e série, t. iii, janvier, 1898, p. 85-90. Fig. no. 6 (diagr.), 2 tables. LC. (T2, S6, v. 3, 1898.)

Tables: i. Boulons-types de 6 mm. à 56 mm. de diamétre. ii. Ecrous, goupilles, etc.

122. FRENCH SCREW GAUGES. (Engi.), v. cxxii, no. 3168, Sept. 15, 1916, p. 234. 300 words. 2 figs. ES. LC. (TA1, E5, v. 122.)

Relates to "instructions' by the French Minister for War, sent out to manufacturers in 1913. Gauge was revised by M. Marre.

Figues show the gauge proper, the "crocodile."

123. FRENCH STANDARD SCREW THREADS. (Eng.), v. lix, April 26, 1895, p. 546. 1440 words. ES. 10982. LC. (TA1, E55, v. 59.)

Article discusses the system proposed by the French Minister of the Marine.

124. GAGING SYSTEMS FOR SCREWS AND TAPS. (Mach.), v. 23. July, 1917, p. 967-968, incl. 9 outline figs. ES. Pam. LC. (TJ1, M2, v. 23.)

Treats on devices for measuring variations in lead and diameter.

125. GARDNER, GUY H.

Gage for U. S. S. thread tools. (Mach.), v. 20, no. 8. April, 1914, p. 681-682, incl. 2 diagrs. ES. Pam. LC. (TJ1M2, v. 20.)

126 GARDNER, GUY H.

Removing rusty screws. (Mach.), v. 23. March, 1917, p. 622-623, incl. diagrs., 1 chart. ES. Pam. LC. (TJ1M2, v. 23.)

127. GARDNER, GUY H.

Screw compensation for shrinkage in hardening. (Mach.), v. 20, no. 6. Feb., 1914, p. 499. ES.—Pam. LC. (TJ1M2, v. 20.)

Below this article: "[Reply by] D. Tappan, incl. 1 diagr., showing lathe carriage with special lead-screw nut to decrease pitch of thread being cut.

128. GARDNER, GUY H.

Thread measuring tool. (Mach.), v. 21, no. 3. Nov., 1914, p. 226, incl. 2 diagrs. ES.—Pam. LC. (TJ1M2, v. 21.)

129. GAY, E.

Montages pour l'usinage de pièces détachées des moteurs d'automobiles. (Tech. M.), v. v, 2e sémestre, 1912, p. 327-332, incl. 15 figs. (half-tones, diagrs., etc.) ES.—E.

"Filetage sur l'extrémité d'un tuyau collecteur," p. 330.

130. GILL, JOHN L., JR.

Screw threads. By John L. Gill, jr., Philadelphia, Pa. (Frank. I.), v. 125, 1888, p. 186-199. 4 plates, (figs., diagr.), 2 fold. plates, (tables.) ES.

Read at stated meeting, Nov. 16, 1887.

Author proposes a new system for which he claims an increase of strength of 17 per cent. over the Sellers system. He also states the objections to the Sellers system.

131. GOVERNMENT COMMISSION TO STANDARDIZE SCREW THREADS. (Soc. Autom. E.), Journal, v. 2, no. 6, June, 1918, p. 449. LC. (TL1, S5. v. 2.)

Relates to bill no. 10852 passed May 8, 1918, by the House of Representatives, as reported by the House Committee on coinage, weights and measures.

132. HALL THREAD-MILLING FIXTURE. (Am. Mach.), v. 48, no. 15. April 11, 1918, p. 638. 150 words, 1 half-tone. ES. LC. (TJ1, A5, v. 48.)

Illustration shows the fixture made and placed on the market by the Hall Gas Engine Co., inc., Bridesburg, Philadelphia, Pa. It is used for cutting either internal or external threads of any form or pitch and either straight or taper.

133. HAMILTON, DOUGLAS THOMAS.

The "Acme" multiple spindle automatic screw machine. i. (Mach.), v. 19, no. 4. Dec., 1912, p. [243]-249; ii., no. 5. Jan., 1913, p. 335-341, incl. 31 figs. (half-tones, diagrs., charts, etc.) tables i-ix. (TJ1M21, v. 19.)

134. HAMILTON, DOUGLAS THOMAS.

Gaging and inspecting threads. i. (Mach.), v. 23, no. 6. Feb., 1917, p. 477-486. Front., 15 figs. (half-tones, sections, etc.), tables no. i-ix; the same, ii. (Mach.), v. 23, no. 7. March, 1917, p. 581-586. 7,000 words. Figs. 16-34 (half-tones, sections, etc.) ES.—Pam. LC. (TJ1, M21, v. 23.)

Table i. British standard Whitworth threads.—Tolerances for bolts.—ii. British standard Whitworth screw threads. iii. Allowances to compensate for errors in pitch of British standard Whitworth screw-threads. iv. Tolerances on included angle of screw threads. (The Engineering Standards Committee). v. Tolerances on pitch diameters of U. S. Standard screws, taps and gages (loose fit tolerances). vi. Tolerances of pitch diameters of U. S. Standard screws, (taps and gages close fit tolerances). vii. Propositions for Briggs standard reference pipe ring gages (Cadillac Motor Car Co.). viii. Propositions for Briggs standard reference pipe plug gages (Cadillac Motor Co.). ix. Dimensions of ball points used in measuring screw threads.

135. HAMILTON, DOUGLAS THOMAS.

Gridley multiple-spindle automatic screw machines. i. (Mach.), v. 23. June, 1917, p. 859-863; ii., July, 1917, p. 973-979, 4,500 words, incl. 33 figs. (half-tones, diagrs., sections, etc.), tables 1-6.

ES.—Pam. LC. (TJ1M2, v. 23.)

Author treats on design, construction, operation and tool equipment.

136. HAMILTON, DOUGLAS THOMAS.

Operating the Gridley multiple-spindle screw machine. (Mach.), v. 24. May, 1918, p. 839-844. 3,500 words, incl. 14 figs. (half-tones, 5 sections, etc.) ES.—Pam. LC. (TJ1M2, v. 24.)

Contains complete instructions for tooling, setting up, and operating the above machine.

137. HAMILTON, DOUGLAS THOMAS.

Screw machine tool equipment. i. (Mach.), v. 24, no. 2. Oct., 1917, p. 118-122, incl. 15 figs. (half-tones, diagrs., etc.); ii, no. 4, Dec., 1917, p. 331-334, incl. figs. 16-27; iii. no. 5. Jan., 1918, p. 436-438, incl. figs. 28-37 (half-tones, diagrs., etc.) LC. (TJ1M21, v. 24.)

Sub-title.—Tool equipment and attachments for the Gridley multiple-spindle automatic screw machine.

138. HAMM, WALTER C.

Standard screws. (Monthly C. R.), no. 293, Feb., 1905, p. 75-76. LC. (HC1R2, 1905.)

Report dated Jan. 4, 1905, by W. C. Hamm, U. S. Consul at Hull, Eng., on Results of labors of a Committee of the British War Office, and on application of standards at the National Physical Laboratory at Bushy House, London.

139. HAMMOND, EDWARD K.

Making precision screws for scientific instruments. (Mach.), v. 23. June, 1917, p. 849-854. 4,000 words, incl. 12 figs. (7 half-tones, diagrs., etc.). ES.—Pam. LC. (TJ1M2, v. 23.)

Author describes methods for cutting and testing precision screws for astronomical and other scientific instruments. Includes instructions for two forms of interferometers, one of which provides means for measuring to one-millionth inch.

140. HARRIS LEAD AND ANGLE TESTING DEVICE FOR THREAD GAGES. (Mach.), v. 24, no. 2. Oct., 1917, p. 178-179, incl. 4 figs. (half-tones, diagrs.) LC. (TJ1M21, v. 24.)

141. [HARTNESS, JAMES]

Scheme of gaging for screwed parts. Letter to editor, by James Hartness, Springfield, Vt. (Am. Soc. M. E.), Journal, v. 40, no. 2. Feb., 1918, p. 157-158, incl. 1 fig. (sections, etc.) ES. LC. (TJ1A72, v. 40.)

Author deals with the betterment of the lead of die-cut screws.

142. HARTNESS, JAMES.

A screw die for the turret lathe. By James Hartness, Springfield, Vt. Paper no. dccliii. (Am. Soc. M. E.), v. xix, 1898, p. 77-80. Figs. no. 19-25 (sections, etc.) LC. (TJ1, A7, v. 19.)

143. HARTNESS, JAMES.

A stay bolt threading device. Paper no. dccliv. (Am. Soc. M. E.), v. xix, 1898, p. 81-82, incl. fig. no. 26, (sections.) LC. (TJ1, A7, v. 19.)

Fig. 26 shows the use of the automatic die described in paper dccliii, under title: A screw die for the turret lathe.

144. HESS, HENRY.

The S. I. Standard metric thread in continental Europe. (Am. Mach.), v. xxiii, no. 18, May 3, 1900, column 422-38, to 39-423. 1,200 words. 2 figs., (diagrs.) LC. (TJ1, A5, v. 23, 1900.)

Fig. 1. Standard metric thread enlarged. Fig. 2. Relation of pitch to diameter.—Metric and U. S. Standard threads.

Author discusses the efforts made for a uniform system of screw threads, and reviews the "Système internationale" which has been adopted in the continental Europe which must be considered by the Manufacturers of America when seeking foreign trade.

145. HINKEL, ROY A.

Time studies in screw-machine practice. (Am. Mach.), v. 48, no. 12, March 21, 1918, p. 507-508, incl. 2 charts. ES. LC. (TJ1, A5, v. 48.)

Chart 1. A time-study sheet.—Chart 2. A chart on screw machine practice.

146. HIRSCHMANN, W. F.

Utilizing discarded geometric chasers. (Am. Mach.), v. 47, no. 24, Dec. 13, 1917, p. 1055. 250 words, incl. 3 figs.

ES.—Pam. LC.(TJ1, A5, v. 47.)

Illustrations: Figs. 1-3. Holder for geometric chasers, facing and centering tool and chamfering tool.

These figs. show how discarded "geometric" chasers can be utilized. . .

147. ILER, W. T. JR.

Master Whitworth thread gages. (Mach.), v. 24, no. 1. Sept.., 1917, p. 51-52, incl. 5 figs., 1 table. LC. (TJ1M21, v. 24.)

148. INSPECTION OF SCREW GAGES FOR MUNITIONS OF WAR. (Mach.), v. 24, no. 5. Jan., 191, p. 452-456, incl. 3 figs. (half-tones), table 1-3. LC. (TJ1M21, v. 24.)

Sub-title: Measurement of pitch and of full, effective and core diameters.

149. INTERNATIONAL SCREW THREADS. (Autom. Ind.), v. xxxvii, no. 26, Dec. 27, 1917, p. 1131. LC. (TL1, A6, v. 37-2.)

Sub-title: London conference Jan., 1918, aims at Anglo-American standardization—under government instigation.

150. INTERNATIONALES GEWINDESYSTEM AUF METRISCHER GRUNDLAGE. (Z. O. I. A.), liii. Jahrg., no. 15. 12. April, 1901, p. 273-274. 800 words. 1 diagr., 1 table. LC. (TA3, O3, v. 53, 1901.)

Table: Skala der normaldurchmesser und der zugehoerigen ganghoehen und schluesselweiten.

Describes briefly, the International metric screw-thread system adopted by the Society of German Engineers, the Society for the Encouragement of national industry, (France), and the Society of Swiss Machine Industry, at Zuerich, Oct., 1900.

151. INTERNATIONAL SYSTEM OF SCREW-THREADS ON A METRICAL BASIS. (Inst. Civ. E.), v. cxxxix, 1899, p. 443. ES. 9424. LC. (TA1, I6, v. 139.)

Abstract of an article in Schweizerische bauzeitung, 1899, p. 54.

152. JACOBS, F. B.

The making of bushing for drill jigs. (Mach.), v. 19, no. 1. Sept., 1912, p. 12-15, incl. 14 figs. (half-tones, diagrs., etc.) LC. (TJ1M21, v. 19.)

Sub-title: Proportions of bushings, materials used, turning, hardening, grinding and lapping operations.

153. JEFFCOTT, H. H.

Notes on screw threads. By H. H. Jeffcott, of the National Physical Laboratory, Teddington. (Inst. Mech. E.), parts 3-4, Dec., 1907, p. 1067. incl. diagrs., formulae, 2 tables. LC. (TJ1, 15, pts. 3-4, 1907.)

154. JEFFCOTT, H. H.

Notes on screw threads. By H. H. Jeffcott, B. A., B. A. I., Principal assistant in the Physics dept. (N. Phys. L.) v. v, 1909, p. 215-250, incl. figs. 1-17 (diagrs., etc.), tables, i, ii, and formulae. P.O.

[Reprinted from the Minutes of proceedings of the Institution of Mech. Engineers, 1907, ii.]

155. JIGS FOR SMALL TOLERANCES. (P. Eng.), v. 58, no. 1636, July 4, 1918, p. 3-4. ES. LC. (TJ1, P8, v. 58.)

Contains also cross-sections and formulas.

156. JONES, FRANLIN D.

General thread cutting practice in the lathe. (Mach.), v. 24, no. 7. March, 1918, p. 634-639, incl. 9 figs. (half-tones, diagrs.), 1 table.

ES.—Pam. LC. (TJ1M21, v. 24.)

Sub-title: Important points on cutting single, multiple and tapering threads by means of single-point tools and chasers.

157. JONES, FRANKLIN D.

Projection method of testing screw threads. (Mach.), v. xxiv, April, 1918, p. 735-738, incl. 8 figs. (half-tones, outline cuts).

ES.—Pam. LC. (TJ1M2, v. 24.)

Arrangement and use of projection apparatus as applied to inspection of thread gages for munitions manufacture.

158. JONES, FRANKLIN D.

Screw thread cutting with dies. (Mach.), v. 24. Oct., 1917, p. [97]-115, 44 figs. (half-tones, sections, etc.), 3 tables. LC. (TJ1M21, v. 24.)

Sub-title: Design, operation, and application of various classes of standard and special tools, machines and attachments used in producing screw threads.

159. JONES, FRANKLIN D.

Thread-cutting attachments. (Mach.), v. 24. Feb., 1918, p. 524-531. 7000 words, incl. 17 figs. (6 half-tones, 11 diagrs., sections, etc.).

ES.—Pam. LC.(TJ1M2,v.24)

Deals with standard and special mechanisms and attachments for engine lathes, turret lathes, drilling and boring machines.

160. JONES, FRANKLIN D.

Thread milling. (Mach.), v. 24. Jan., 1918, p. 413-428, incl. illus., diagrs. LC.(TJ1M2,v.24)

161. JONES, FRANKLIN D.

Thread rolling. (Mach.), v. xxiv, April, 1918, p. 690-696; May, 1918, p. 803-809, incl. 27 figs. (half-tones, sections, etc.).

ES.—Pam. LC.(TJ1M2,v.24)

Different methods of forming screw threads by rolling.

162. KARTSHER, HARRY S.

Finding effective bearing area of Acme screw threads. (Mach.), v. 24, no. 5. Jan., 1918, p. 440, incl. 1 fig. (diagrs.), 1 table, formulas. LC.(TJ1M21,v.24)

163. KING, WILLIAM RICE

Experiments with bolts and screw threads. By Major W. R. King, U. S. Engineers, Chattanooga, Tenn. (Am. I. M. E.), v. xiv, June, 1885, p. 90-98. 5 outline figs. LC. (TN1 A5, 1885)

Papers of the xliid (Chattanooga) meeting, May, 1885.

"Experiments with screw-threads and nuts," p. 93-96.—"Mean results," p. 96-98.

The author's aim was to determine the advantage of increasing the number of threads. The results show 20 per cent increase of static strength and 3 or 4 times strength to resist impact, by doubling the number of threads to the inch.

This article was reprinted incl. figs., in: Engineering News, v. xiii, Oct. 17, 1885, p. 243-244, and an abstract of the same appeared in: Scientific American v. liii, no. 16, Oct. 17, 1885, p. 224.

164. KONINKLIJK INSTITUUT VAN INGENIEURS. Vakafdeeling voor werktuig en scheepsbouw. Unification des filetages sur tubes. (S. E. I. N.), 99e, année, 5e série, t. v., 28 février, 1900, p. 278-283. 1000 words. 4 tables (questionnaire). LC.(T2,S6,v.5,1900)

This is a questionnaire sent out by the Section of Machinery and Naval Construction of the Royal Institute of Engineers of the Netherlands, providing blank forms for replies. United action in order to secure a uniform standard is urged, by the secretary of the commission, Mr. B. M. Gratama.

165. LEA THREAD LEAD TESTER. (Mach.), v. 24, June, 1918, p. 949-950, incl. 4 half-tones. ES.—Pam. LC.(TJ1 M2,v.24)

166. LEE, ERIC.

Handy gage for setting up threading tools. Letter to Editor. (Mach.), v. 24, no. 2. Oct., 1917, p. 155-156. 210 words, incl. 1 fig. LC.(TJ1M21,v.24)

167. LEE, ERIC.

Spring threading tool Letter to editor. (Mach.), v. 24, no. 3. Nov., 1917, p. 248, 330 words, incl. 1 fig. LC.(TJ1M21,v.24)

168. LINDGREN, J. E.

Grinding and lapping threads. (Mach.), v. 24, July, 1918, p. 1023-1024, incl. 5 figs. (sections, etc.)

Sub-title: Attachments, fixtures, and laps used for producing accurate threads. ES.—Pam. LC. (TJ1, M2, v. 24.)

169. LONGWORTH, G. H.

Dividing the pitch of double and multiple threaded screws. (Mech. W.), v. xlix, o. 1265. March 31, 1911, p. 146. 1800 words. 4 figs. LC.(TJ1M55,v.49,1911)

Gives a description of the various methods employed.

170. THE LOWENHERZ THREAD.

(Mach.), v. xxiv, May, 1918, p. 837, incl. 1 diagr., 1 table, formulas. ES.—Pam. LC.(TJ1 M2,v.24,1918)

171. LUCAS, J. A.

French gages for sheets, wire and screw threads. (Am. Mach.), v. 47, no. 10, Sept. 6, 1917, p. 424-425, incl. 2 figs. (sectional views), tables i-xi, and formulas. ES. LC.(TJ1 A5,v.47)

172. MACGOWAN, F. A.

Time studies on automatic screw-machine products. (Am. Mach.), v. 48, no. 16, April 18, 1918, p. 676, incl. 3 charts. ES. LC.(TJ1A5,v.48)

173. MCINTYRE, JAMES.

Measuring threaded work. (Mach.), v. 22. July, 1916, p. 982. 500 words, incl. 2 outline cuts. ES.—Jam. LC.(TJ1M2,v.22)

On methods found useful by author in measuring the diameter of threaded work.

174. MACINTYRE, J. R.

Production of accurate thread gages. (Mach.), v. 24, no. 1. Sept., 1917, p. 31-32, incl. 5 figs. LC.(TJ1M21,v.24)

Sub-title: Methods used in making thread-cutting and radius-forming tools and angle-grinding fixture.

175. MARRE, CHARLES.

Exécution pratique des vis à filet triangulaire, par M. Marre, Ingénieur de la maison Bariquand et Marre. (S. E. I. N.), 92e année, 4e série, t. viii, 1893, p. 243-251, incl. 3 figs. (diagrs.). LC.(T2S6,v.92,1893)

Contents. 1. Une série unique pour les pas des vis à métaux dans un meme pays est à désirer. 2. Machines-outils et outillage employés á notre époque. 3. L'Interchangeabilité des vis dépend des types de vérification. 4. Les types de vérification interchangeables dépendent de la constante des outils simples. 5. Données d'exécution. 6. Déformation des angles par suite de l'inclinaison des outils sur les machines pour obtenir la coupe. 7. Outils ordinaires généralement employés. 8. Outil de précision à angle constant. 10. [i. e.] 9. Série des pas Bariquand.

176. MARRE, CHARLES.

Rapport sur l'unification internationale des pas de vis dans les filetages sur les tubes et tuyaux des conduites et canalisations pour les fluides, présenté par M. Marre à la Commission des filetages de la Société d'encouragement. (S. E. I. N.), 115e année, ler sémestre, t. 125, no. 3, mai-juin, 1916, p. 468-475, incl. 1 profile, 2 sections, 1 table. LC. (T2 S6,v.125)

Signed: Chas. Marre. . .

At head: "Annexe de la séance du 7 mars, 1916."

Fig. 1. Filetage cylindrique. Fig. 2. Filetage conique. Fig. 3. Profil du filet.

Table: Dimensions proposées pour l'unification universelle des filetages sur tubes. . . .

177. MARRE, CHARLES.

Standard screw threads for pipes. (Inst. Civ. E.), v. cciii, 1916-1917, p. 432. 100 words. ES. LC.(TA1 I 6,v.203)

Abstract of paper dealing with the standard screw threads adopted by a commission of the Society of Encouragement of National Industry, Paris.

178. MARRE, CHARLES.

Sur les instruments vérificateurs des filetages, système française (S. F.), par M. Marre, Ingénieur mécanicien. (S. E. I. N.), 97e année, 5e série, t. iii, janvier, 1898, p. 77-83. 4 outline figs. LC.(T2 S6,v.3,1898)

Author describes the system of gauges used on the metric, French screw thread system.

179. MARTENS, A.

Einfluss der gewindeform auf die festigkeit der schraubenbolzen. (V. D. I.), band xxxix, no. 17. 27. April, 1895, p. 505-508. 13 outline figs., tables i-vii. LC. (TA3 V5,v.39-1,1895)

Title: Influence of the shape of the thread on the strength of the bolt.

Relates to a number of tests made of the tensile strength of bolts provided with different kinds of threads.

180. MASTER CAR BUILDERS' ASSOCIATION, Committee on Screw-Heads, Bolt-Heads and Nuts.

Report of committee. (Hist. E. R.), p. 80-82, incl. 1 table. PO.

Committee: V. D. Perry, Hartford, Prov., & Fishkill Railroad; Geo. Hacket, Central R.R. of New Jersey; R. Hitchcock, Conn. River Railroad.

"Standard for screw-threads, bolt heads and nuts, adopted by the United Am. Railway Master Car Builders' Assoc'n., in convention, at Richmond, Va., June 15, 1871," p. 82.

181. MASTER CAR BUILDERS' ASSOCIATION.

Committee to investigate and report on the present construction of screws and nuts used on cars . . . (Master C. B. A.), 13th convention, 1879, p. 70-73, incl. 2 tables. PO.

Submitted by John Orton, C. S. R.

Discussion, p. 76-83.

Standard for screw-threads, bolt-heads, and nuts adopted by the M. C. B. A., in convention, at Richmond, Va., June 15, 1871.

Table, p. 121.

182. [MASTER CAR BUILDERS' ASSOCIATION.]

Screw threads. (Master C. B. A.), report of proceedings of an adjourned meeting . . . held at Niagara Falls, 1882, p. 75-76. 1 fold. table. PO.

Fold. table: "Proportions for Sellers' standard screw-threads, nuts and bolts," facing page 75.

183. [MASTER CAR BUILDERS' ASSOCIATION.]

Standard screw threads on cars. (Master C. B. A.), 17th annual convention, 1882, p. 200-223, incl. 6 figs., 2 tables. PO.

Signed: M. N. Forney.

"Standard for screw-threads, bolt-heads and nuts adopted by the Master Car Builders' Assoc'n., in convention, at Richmond, Va., June 15, 1871," p. 239.

184. [MASTER CAR BUILDERS' ASSOCIATION.]

Screw threads, bolt heads and nuts. Standard. (Master C. B. A.), v. 33, 1899, p. 425-428. Figs., diagrs., tables. ES. 25103

185. [MASTER CAR BUILDERS' ASSOCIATION.]

Screw-threads, bolts and nuts. Standard. (Master C. B. A.), v. 49, pt. 2, p. 840-845, 1916, incl. fig. no. 11-16, 2 tables. LC.(TF371,M41,v.49-2)

The same, v. 50, pt. 2, 1916, p. 899-905, incl. figs. no. 11-16. 1 diagr., 2 tables. LC.(TF371 M41,v.50-2)

"Specifications for bolts and nuts," p. 901. iv: Permissible variations. 5. Gage of bolts. 6. Threads.

186. [MASTER CAR BUILDERS' ASSOCIATION.]

Screw threads, bolt heads and nuts. Standard. (Master C. B. A.), v. 51, 1917, p. 565-572, incl. figs. 11-16, 1 diagr., tables i, ii, 2 folding plates (diagrs., tables). LC.(TF371M41,v.51)

187. MEASURING AND GAGING SCREW THREADS. (Am. Mach.), v. 46, no. 23, June 7, 1917, p. 1001-1003, incl. 9 figs. ES. LC.(TJ1,A5,v.46)

Fig. 1. Gage for pitch diameter and lead. Figs. 2, 3. Various gages for pitch diameter and lead. Figs. 4-9. Various gages for testing screw threads. Gages for measuring or testing taps or screws are briefly described.

Editor reminds the reader that the subcommittee of the A. S. M. E. is studying the question of screw-thread tolerances, and would be glad to receive further suggestions from all who are interested in this important problem.

188. MEASURING A 65-DEGREE V-THREAD. (Mach.), v. 24, no. 1, Sept., 1917, p. 63. 180 words. 1 fig. (diagrs.). LC.(TJ1M21,v.24)

189. MEASURING SCREW THREADS BY MEANS OF MICROMETERS. (Mach.), v. 19, no. 5. Jan., 1913, p. 384, incl. 1 fig., 1 table. Signed "A." LC.(TJ1M21,v.19)

190. METRISCHES S-I GEWINDE UND SCHRAUBENSCHLUESSELWEITEN. (V. D. I.), band xxxxiv. 2. halbjahr, 10. nov., 1900, p. 1556. 1 table. LC. (TA3 V5,v.44-2)

Short note.
Table: Skala der normaldurchmesser und der zugehoerigen ganghoehen und schluesselweiten.

191. A MICROSCOPE FOR MEASURING SCREW THREADS. (Am. Mach.), v. xxvii, part i, no. 3, Jan. 21, 1904, p. 78. 700 words, 7 figs. (3 half-tones, 4 diagrs.). LC. (TJ1A5,v.27-1)

Figs. 1-3. Screw measuring microscope. Figs. 4-6. Arrangement of cross wires and various adjustments.

192. MODERN FRENCH FIELD-GUN. (Eng.), v. lxxxiv, Dec. 6, 1907, p. 775-778. 16 figs. (sections, etc.), tables. ES. 9727 LC.(TA1,E55,v.84)

Constructed by Schneider et cie., Creusot and Havre, France.

193. MOORE, GEORGE R.
Size difference of bolts and nuts for "V" and standard threads. (Am. Mach.), v. xxx, pt. i. May 16, 1907, p. 691, incl. table. ES. 8675 LC.(TJ1 A5,v.30)

Table: Moore's table of size differences of bolts and nuts for "V" and standard threads.

194. THE NATIONAL PHYSICAL LABORATORY IN 1908. (Eng.), v. lxxxvii, March 26, 1909, p. 408-410; April 2, 1909, p. 445-447. ES. 15330 LC. (TA1,E55,v.87)

"The Engineering standards committee." Screw-gauges of five standard systems have been verized" . . . p. 446.

195. THE NATURE OF WORN THREAD CONTACT. (Ry. Mach.), v. ii, no. 4. Feb. 10, 1903, p. 171. 210 words. Pat. Off. Lib.

Refers to an article by Oscar J. Beale, on the subject, which had appeared in the Am. Machinist.

196. [NEWMAN, W. H.]
Screw gauges. Letter to editor by W. H. Newman, Totteridge, Herts, Feb. 10, 1917. (Eng.), v. ciii, no. 2668. Feb. 16, 1917, p. 163. 220 words. ES. LC.(TA1E55,v.103)

Relates to method of correcting the progressive error of the lead screw of a lathe by suitably chosen change wheels.

197. NOTROH, A. F.
Cutting a lead screw. Letter from A. F. Notroh, Providence, R. I. (J. Ry. App.), Feb., 1900, p. 407, incl. 1 fig. PO.

Fig.: The screw that was to be cut.

198. OBERG, ERIK.

Screw thread systems. By Erik Oberg, associate editor of Machinery. (Mach.), Shop edition, v. 14, no. 6, Feb., 1908, p. 251-253. 7 figs., 2 tables. ES.—Pam. LC.(TJ1M2,v.14)

Contents.—U. S. Standard thread.—The sharp V-thread.—The Whitworth Standard thread.—British Standard fine screw thread.—British Association Standard thread.—Briggs Standard pipe thread.—Whitworth Standard thread for gas and water piping.—Square thread.—The Acme thread.—French and international standard threads.—Instrument and watchmakers' system.—Lag screw threads.—Gas fixture threads.—Fine screw thread systems.

Footnote: "The following articles relating to screw thread systems have been previously published in Machinery: Whitworth vs. Sellers thread, May, 1899; Screw pitches in foreign countries, Feb., 1900; Screws, Sept., 1903; Proposed standards for machine screws, June, 1906."

198a. OTTERSON, J. E.

Munitions design for quantity manufacture. (Am. Soc. M. E.), Journal, v. 39, no. 5. May, 1917, p. 380-381. ES. LC.(TJ1A72,v.39)

This is an abstract of a paper for presentation at the spring meeting, Cincinnati, O., May 21-24, 1917, of the American Society of Mechanical Engineers.

Also in: (Iron Age), v. 99. May 10, 1917, p. 1135-1136; (Iron Trade Reiew, Cleveland, O.), v. 60 May 24, 1917, p. 1128-1129.

Deals with the question of the relation of design to quantity manufacture, under abnormal conditions.

199. PAJEKEN, J. F.

Metrisches gewinde. (V. D. I.), band xxxix, no. 2, 12. Jan., 1895, p. 51-52. 16 outline figs. LC (TA3 V5,v.39-1,1895)

Title: Metrical screw threads.

Treats on the production of screw threads in the factory of Ludwig Loewe & Co., Berlin.

199a. PATTON, THOMAS A.

Masked tolerances. Letters from Thomas A. Patton, Moores, Penn'a (Am. Mach.), v. 46, no. 16. April 19, 1917, p. 694-695. ES—LC(TJ1A5,v.46)

Treats on tolerances in manufacture of projectiles and munitions.

200. PAYET, J.

Note sur l'unification des pas de vis pour les appareils d'utilisation à gaz. Communication présentée au nom de Comité de la Société technique de l'industrie du gaz en France, au Congrès de 1902, par M. J. Payet, secrétaire. (S. E. I. N.), Bulletin. 101e année, 2e sémestre, juillet, 1902, p. 112-123. Figs., tables, 4,000 words. LC (T2S6,t.101)

"Système internationale de zletages en Suisse," p. 122-123.

Treats on the unification of the pitch of screw threads, being a discussion of the metric screw thread system for gas pipe and fittings suggesting also changes, proposing unification.

201. PAYET, J.

The standardization of screws for gas connections. [By] J. Payet, on behalf of the Société's Committee on the subject. (P.Eng.), v. 26, no. 801, July 4, 1902, p. 10. 800 words. LC (TJ1P8,v.26,1902)

Paper read before the Société technique de l'industrie du gaz, France, June, 1902.

Explains how the international system in use for rods and bolts may be applied to gas connections.

The question of the standard of screws in France was raised in 1891, by M. Sauvage at a meeting of the Society for Encouragement of National Industry, and a committee was appointed to deal with the subject.

202. PEAM, FERD.

The geometry of the square-thread screw. (Am. Mach.), v. xxvii, part ii, no. 43, Oct. 27, 1904, p. 1421-1424. 3,000 words, 6 outline figs. LC. (TJ1, A5, 1904, v. 27-2.)

Figs. 1-4. Showing the impossibility of square threads of infinite pitch. Fig. 5. Limiting case of a square thread screw. Fig. 7. Finding the form of the tool. Fig. 6. A square thread screw having six threads.

Shows how screws and nuts of low helix angle may be made a commercially perfect fit.

203. PETERS, TH.

Metrisches gewinde (V. D. I.), v. xxxxii, no. 49. 3 Dec., 1898, p. 1367-1372. 3,500 words. 3 diagrs., 2 tables. LC. (TA3, V5, v. 42.)

"[Bibliography]:" Nachweis der literatur ueber schrauben-gewinde, im besonderen metrischer systeme, geordnet nach den jahren des erscheinens," p. 1370-1372.

This is a general review of the subject (Metric screw threads), referring especially to the Conference at Zuerich. A valuable bibliography chronologically arranged, is appended on p. 1370-1372.

204. PICARD, MAURICE.

Commission des filetages. Unification des filetages des vis horlogères. Rapport sur le projet présenté par M. Maurice Picard. (S. E. I. N.), Bulletin. 108e année, t. 112, 2e sémestre, no. 8, août, sept., oct., 1909, p. [366]-376. Tables. 1 fold. plate, (diagrs.) At head of title: Mécanique. LC. (T2S6, v. 112.)

Report on a proposal to standardize threads in watch and clock manufacturing, made to the Commission on Screw Threads of the Society for Encouragement of National Industry.

205. PITCH DIAMETERS FOR METRIC SYSTEM SCREW THREADS. (Mach.), v. 19, no. 6, Feb., 1913, p. 441. 120 words. 1 table. LC. (TJ1, M21, v. 19.)

206. PITCH, LEAD AND THREADS PER INCH. (Mach.), v. 24, no. 3. Nov., 1917, p. 200. 430 words. LC. (TJ1M21, v. 24.)

207. POINTS ON MAKING AND USING THREADING CHASERS. (Mach.), v. 21. Aug., 1915, p. 1015-1016, incl. 4 diagrs. ES.—Pam. LC. (TJ1M2, v. 21.)

208. PORTER, CHARLES T.

Finer screw threads. By Charles T. Porter, Montclair, N. J. Paper no. 958. (Am. Soc. M. E.), v. xxiv, Dec., 1902, p. 137-142, incl. Figs. 30, 31, 32 (diagrs.), table i. With discussion. LC. (TJ1, A7, v. 24.)

Author argues that the existing system reduces the area of cross-section of the bolt unnecessarily, and that the steep inclination allows the nut to jar loose easily.

Table shows system proposed.

208a. POWELL, H. J. BINGHAM.

The gagemakers' inspection of his own product. (Am. Mach.), v. 48, no. 4. Jan. 24, 1918, p. 141-142. ES. LC. (TJ1A5, v. 48.)

Contents.—Help for gagemakers.—The question of tolerances.—Great accuracy necessary.—What happens with conditions as they are at present.

209. POWELL, H. J. BINGHAM.

Gaging screws. (Am. Mach.), v. 48, no. 25, June 20, 1918, p. 1045-1046. ES. LC. (TJ1, A5, v. 48.)

Contents.—Obtaining interchangeability.—The various sizes used.—The split-ring screw gage.—An example.

210. POWELL, H. J. BINGHAM.

The inspection of screw gages for munitions of war. (Am. Mach.), v. 47, no. 25. Dec. 20, 1917, p. 1065-1073, incl. figs. 1-5, (half-tones). ES.—Pam. LC. (TJ1, A5, v. 47.)

Author is, Inspector in charge, Dept. of Gages and Standards, British Ministry of Munitions of War in U. S.

Contents.—The measurement of the pitch.—Devices for measuring pitch.—Pitch from thread to thread.—Leveling operations.—Ring screw gages.—Plug-screw gages.—The thread-micrometer principle.—One wire better.—Tolerance allowed.

Illustrations: 1. National Physical Laboratory projection machine. 2. Bingham Powell pitch machine. 3. Apparatus for taking true casts or ring screw gages. 4. National Physical Laboratory screw measuring machine. 5. Attachment placed in Pratt & Whitney measuring machine.

Aim of author is to assist screw-gage manufacturers in their work of making gages for munitions of war, which have to be accurate within very low tolerances.

The same article condensed, in: (Mach.), v. 24, Jan., 1918, p. 452-456.

An abstract of this article in: (Am. Soc. Mech. E.), Journal, v. 40, Jan., 1918, p. 108-109.

210a. POWELL, H. J. BINGHAM.

The relation of screw-thread angles to other functions. (Am. Mach.), v. 49, no. 13. Sept. 26, 1918, p. 571-573, incl. diagrs., 2 tables. ES. LC. (TJ1A5,v.49)

[Synopsis]: "In the discussion relative to the adoption of an international standard for screw threads the advocates of different angles for their slope and different forms for their roots and crests all have seemingly good reasons for advocating the adoption as an international standard one of the types now in use."

211. POWELL, H. J. BINGHAM.

Screw gage measuring machine. (Am. Mach.), v. 47, no. 20. Nov. 15, 1917, p. 840-842, incl. figs. 1-3 (sections, etc.). ES. LC. (TJ1, A5, v. 47.)

212. [PRATT & WHITNEY CO., HARTFORD, CONN.]

The milling-cutter applied to the production of screw-threads. (Eng. N.), v. xlix, no. 1, Jan. 1, 1903, p. 21-23. 4 figs., (half-tones). ES. LC. (TA1, E6, v. 49, 1903.)

Figs. 1, 2. Front and rear view of 6x14-in. thread-milling machine. Fig. 3. Milling-cutter used on thread-milling machine. Fig. 4. Specimens of work done on thread-milling machine.

213. PRECISION SCREW MEASURING MACHINE. (Mach.), v. 24. Feb., 1918, p. 494-495, incl. 4 figs. (half-tones, diagrs., etc.) ES.—Pam. LC. (TJ1M2, v. 24.)

A description of precision screw-measuring machine made by the Cambridge Scientific Instrument co., ltd., Cambridge, Eng.

It was made for the small screw-gage committee of the British Association for testing accuracy of commercially produced screw-threads and taps.

214. PROPOSED CHANGE IN PIPE THREAD. (Autom. Ind.), v. xxxix, no. 5. Aug. 1, 1918, p. 180. 270 words. LC. (TL1, A6, v. 39.)
Short review of the work on the subject by various committees.

215. PROPOSED MODIFICATION OF WHITWORTH THREAD. (Iron Age), v. 99. April 12, 1917, p. 930, incl. diagrs. LC. (T1, I7, v. 99.)
Relates to an article by W. C. Unwin, in Engineering, Feb. 16, 1917, which see (no. 300).

216. PROPOSED SCREW THREAD COMMISSION. (Am. Soc. M. E.), v. 40, no. 5. May, 1918, p. 421. ES. LC. (TJ1, A72, v. 40.)
From Iron Age, N. Y., April 4, 1918, p. 870-871.

217. PROPOSED SCREW-THREAD LEGISLATION. (Soc. Autom. E.), v. ii, no. 3, March, 1918, p. 229. LC. (TL1S5, v. 2.)
Relates to the history of the bill by Hon. John Q. Tilson, M. C., from Conn., introduced in the H. R. on March 5, 1918, and its aims.

218. PROPOSED STANDARDS FOR MACHINE SCREWS. (Ry. Mach.), June, 1906, p. 520-522. vi tables. Diagrs. Pat. Off. Lib.
Tables show the various standard threads.

219. PROPOSED UNIFORM SYSTEM OF SCREW THREADS FOR FRANCE. (Am. E. R. J.), v. lxvii, (new series v. vii), no. 12, Dec., 1893, p. 584-585. 1 table, 1 formula. LC. (TF1A3, v. 67, 1893.)
Formula and table giving the pitch, length of screw of different trade numbers.
Abstract from Bulletin de la Société d'encouragement pour l'industrie nationale.

220. A PROPOSED UNIFORM SYSTEM OF SCREW THREADS FOR FRANCE. (Inst. Civ. E.), v. cxiv, 1892-93, p. 442-444, incl. 1 table.
ES. 9399. LC. (TA1, I6, v. 114.)
Abstract from a report of the commission appointed by the Society for Encouragement of National Industry, in its bulletin, 1893, p. 173.
The original paper contains also a memoir by Mr. Marre, of the firm Bariquand et Marre, on the "Manufacture of triangular screw threads." See no. 175.

221. RANTSCH, EDWARD J.
Lathe gears for cutting metric screws. (Am. Mach.), v. 48, no. 11, March 14, 1918, p. 442, incl. table, formulas. ES. LC. (TJ1, A5, v. 48.)

222. REVISION OF PIPE-THREAD STANDARDS. (Power), v. 48, no. 7. Aug. 13, 1918, p. 250. 500 words. ES. LC. (TJ1, P7, v. 48.)
Discusses the labors of the committee on the revision of pipe threads, appointed by the Am. Society for Testing Materials, in Jan., 1915.

223. RICHARD, GUSTAVE.
Notes de mécanique. Application des règles du système francais de filetage pour les vis mécanique au matériel de la Compagnie de l'Ouest. See France. Compagnie de Chemin de Fer de l'Ouest.

224. RICHARD, GUSTAVE.
Notes de mécanique. Application des règles du système francais de filetages. Outils de taraudage établis par la Société Alsacienne de con-

structions mécanique. (S. E. I. N.), 97e année, 5e série, t. iii, no. 1, janvier, 1898, p. 84-85, incl. 5 figs. LC. (T2, S6, v. 3, 1898.)

225. RICHARDS, W.
The production of screw-thread gages. (Mech. W.), March 24, 1916. 2,000 words. Illus. LC. (TJ1, M55, 1916.)

226. ROBERTS, A. W.
Device for measuring thread gages. (Am. Mach.), v. 47, no. 4. July 26, 1917, p. 135. 600 words, incl. 1 half-tone.
ES. LC. (TJ1, A5, v. 47.)
Illustration shows a very simple and comparatively inexpensive device evolved by Mr. Roberts.

227. RODGERS, L. J.
Compensating screw threads for shrinkage. (Mach.), v. 20, no. 7. March, 1914, p. 585, incl. formulas. ES.—Pam. LC. (TJ1M2, v. 20.)

228. ROGERS, WILLIAM A.
On a practical solution of the perfect screw problem. By W. A. Rogers, Cambridge, Mass. Paper cxlvi. (Am. Soc. M. E.), v. 5, 1884, p. 216-259. With discussion. 1 fig. (no. 65), 6 tables. 3 fold. plates (diagrs.)
LC. (TJ1, A7, v. 5, 1884.)

229. ROLLED THREADS FOR SCREW SHELLS. (Mach.), v. 22, Feb., 1916, p. 510, incl. 4 figs., tables i-iv. ES.—Pam. LC. (TJ1M2, v. 22.)
The same article was published in: (Elec. W.), v. 67, no. 5. Jan. 29, 1916, p. 260, under title: Standardization of threads of sockets and lamp bases. See no.

230. ROLLING INTERNAL THREADS. (Mach.), v. 24, no. 2. Oct., 1917, p. [162]. 260 words. LC. (TJ1M21, v. 24.)

231. ROWELL, WILLIAM S.
Measurement of internal threads. (Mach.), v. 24, no. 5. Jan., 1918, p. 429, incl. 2 figs., formulas. LC. (TJ1M21, v. 24.)

232. ROWELL, WILLIAM S.
Wear of micrometer screw nut. Letter to editor. (Mach.), v. 24, no. 2. Oct., 1917, p. 156. 360 words, incl. 2 figs. LC. (TJ1M21, v. 24.)

233. S. A. E. STANDARD THREADS. (Mach.), v. 21, no. 6, Feb., 1915, p. 459. 420 words. ES.—Pam. LC. (TJ1M2, v. 21.)

234. SAUVAGE, ED.
Congrès international pour l'unification des filetages à Zurich, du 2 au 4 octobre, 1898. (S. E. I. N.), 97e année, 5e série, t. iii, no. 10, octobre, 1898, p. [1269]-1273. LC. (T2, S6, v. 3, 1898.)

235. SAUVAGE, ED.
Filetage international. Ouvertures de clefs pour les vis du système international. (S. E. I. N.), 99e année, 5e série, t. vi, no. 11. Nov., 1900, p. [671]-672. 1 table. LC.(T2,S6,v.6,1900)

236. [SAUVAGE, ED.]
International system of screw threads. (Inst. Civ. E.), v. cxxxvi, 1898, p. 408-409. ES. 9421 LC.(TA1 I6, v.136)

This is an abstract from an article by M. Sauvage, in: Revue de mécanique, 1898, p. 407.

The article deals with an International Congress held at Zurich in Oct., 1898, on the above question, with delegates from France, Germany, and Switzerland, and states details of system adopted.

237. SAUVAGE, ED.

Mémoire sur l'unification des filetages, par Ed. Sauvage. (S. E. I. N.), 92e année, 4e série, t. viii, avril, 1893, p. 179-242, incl. 55 figs. (diagrs., sections, etc.), tables, formulas. LC.(T2S6,v.92,1893)

"Bibliographie:" p. 242.

238. SAUVAGE, ED.

Observation sur le filetage Whitworth. (S. E. I. N.), 116e année, 1er sémestre, t. 127, no. 1. Janvier-fév., 1917, p. 354. 240 words. 3 fold. plates, tables. LC. (T2S6,v.127)

239. SAUVAGE, ED.

La question des filetages en Allemagne. (S. E. I. N.), 92e année, 4e série, t. viii, Sept., 1893, p. 704-706. LC.(T2,S6,v.92,1893)

At head: Extraites des publications françaises et étrangères.

This is an extract from an article published in the "Zeitschrift des vereins deutscher ingenieure," 1893, p. 473-515, in which interesting details are given of the projects for the standardization of screw-threads being studied (at the time).

240. SAUVAGE, ED.

Règles pour la construction des vis mécaniques. (Rev. M.), mai, 1897. 4000 words. CE.—E.

Rules for the construction of machine screw-threads.

Author reviews the new metric system for screw threads, and the standard wire gauge system adopted by the Society of Encouragement of French Industry, shows screw proportions and gives a comparison of that system with English and American threads.

241. SAUVAGE, ED.

Le système internationale de filetage à base métrique. Communication présentée à la conférence génerale des poids et mesures réunie à Sèvres en octobre, 1904, par M. E. Sauvage. (S. E. I. N.), 101e année, 1er sémestre, t. 102, Janvier, 1902, p. 130-132. LC.(T2S6,v.102)

242. SAUVAGE, ED.

Unification des filetages. Congrès international de Zurich. Système international de Zurich. Système international de filetages, à base métrique, pour les vis mécaniques, par M. E. Sauvage, Membre du conseil. (S. E. I. N.), 98e année, t. iv, 5e série, no. 3, mars, 1899, p. 421-457. 1000 words. 4 figs. LC.(T2,S6,v.4,1899)

"Bibliographie relative aux filetages spécialement aux filetages à base métrique, par ordre chronologique," p. 454-457 (from Zeitschrift deutscher ingenieure, Berlin, 3 Dec., 1898, p. 1370).

The above represents the full report of the International Congress for the standardization of metric screw-threads, held at Zurich, 1898, together with the text of discussions and an elaborate bibliography on the subject.

243. SCHLINK, F. J.

Method of indicating screw threads. (Mach.), v. 22. May, 1916, p. 800. 240 words, incl. 1 outline cut. ES.—Pam. LC.(TJ1M2,v.22)

Describes a simple and yet perfectly explicit convention for delineating the threads of screws.

244. SCREW AND WEDGE BREECH-MECHANISM. (Eng.), v. lxxxv, Feb. 14, 1908, p. 207. See also no. 2, no 19. ES. 15328 LC.(TA1,E55,v.85)

245. SCREW GAGES. (Sci. Am. S.), v. lxxxiv, Nov. 24, 1917, p. 333. ES. LC.(T1F52,v.84)

Relates to Col. Crompton's paper on some notes on screw gages, presented before the Institution of Automobile Engineers, London.

246. SCREW GAUGES. (Engi.), v. cxxi, no. 3143. March 24, 1916, p. 263-264. 3 figs. (sections, etc.). ES. LC.(TA1E5,v.121)

Fig. 1. Method of carrying micrometer in lathe. Fig. 2. Cheap apparatus for measurement of thread angles. Fig. 3. Eyepiece being rotated until wire is just touching crests of threads.

Refers to Mr. W. Taylor's method shown in Report no. 38, Engineering standards committee.

247. SCREW GAUGES. Report of committee to the British Association, Liverpool meeting (Eng.), v. lxii, Oct. 16, 1896, p. 509-510. 7 figs. (sections), 3 tables. ES. 10985 LC.(TA1E55,v.62)

Contents.—The past.—ii. The present.—iii. The future.

Appendix i. Enlarged shadow photographs of screws, by Col. Watkin, C. B., R. A., etc.—Appendix ii. Gauges for verifying the accuracy of screws (for workshop use only), by A. Stroh.—Appendix iii. Working dimensions in mm. and 1000th of an inch.

This is the report of a committee appointed to the British Association, "to consider means by which practical effect can be given to the introduction of the screw gauge proposed by the association in 1884." Chairman, W. H. Preece. Secretary, Conrad W. Cooke. Members: Lord Kelvin, Sir F. J. Bramwell, Sir H. Trueman Wood, Major-General Webber, R. E. Crompton, A. Stroh, A Le Neve Foster, C. H. Hewitt, G. K. B. Elphinstone, T. Buckney, Col. Watkin, E. Rigg, and W. A. Price.

248. SCREW-MEASURING MACHINE AT THE NATIONAL PHYSICAL LABORATORY. (Eng.), v. lxxvi, Nov. 13, 1903, p. 660-661. 1200 words. 9 figs. (3 halftones, 6 sections. ES. LC.(TA1E55,v.76)

Description of a machine for testing with aid of micrometer, the accuracy of commercially produced screw threads and taps.

The machine was constructed by the Cambridge Scientific Instrument co., ltd., for the N. P. Laboratory.

249. SCREW PITCHES IN FOREIGN COUNTRIES. (Mach.), v. 6, no. 6, Feb., 1900, p. 164-166. 1600 words. 5 tables. LC.(TJ1M2,v.6)

Sub-title: Data upon the pitches of screws used abroad and the gearing for cutting them.

250. SCREW PITCHES IN FOREIGN COUNTRIES. Data upon the pitches of screws used abroad and the gearing for cutting them. (J. Ry. App.), Feb., 1900, p. 388-389. 5 tables. Pat. Off. Lib.

251. SCREW THREAD COMMISSION. (Iron Age.), v. 101, no. 14. April 4, 1918, p. 870-871. LC.(T1 I7,v.101)

Bill before the House [of Representatives] to establish a national standard of supreme importance.

251a. SCREW THREAD COMMISSION ORGANIZED. (Soc. Autom. E.), Journal, v. iii, no. 4. Oct., 1918, p. 288. ES. LC.(TL1S6,v.3)

This first meeting of the Commission for Standardization of screw threads was held Sept. 12, 1918, at the U. S. Bureau of Standards, Washington. It was largely for the purpose of organization, since the members of the commission had not been formally appointed. The commission consists of: Dr. S. W. Stratton, Chairman; Lieut. Col. E. C. Peck, Ordnance dept.; Major O. B. Zimmerman, Engineers; Comdr. S. M. Robinson, Comdr. L. J. Marquart, U. S. Navy; Mr. Edwin H. Ehrman, H. T. Herr, for the S. A. E.; James Hartness and F. O. Wells, representing the A. S. M. E.

The following sub-committees have been formed: 1. Systems, including questions relative to profile, pitch and diameter. 2. Classification, including questions relating to tolerances, allowances and nomenclature. 3. Gages and methods of testing and specifications. Mr. H. W. Bearce will act as secretary, and Mr. R. Lacy as assistant secretary to both, the commission and the sub-committee; to the latter Mr. H. L. Van Keuren will also act as assistant secretary.

252. SCREW THREAD MEASUREMENT. (Iron Age), v. 99, no. 15. April 12, 1917, p. 894-895, incl. 7 figs. (diagrs., etc.). LC.(T1 I7,v.99)

From paper read before the Liverpool Engineering Society.

Sub-title: Some of the accurate methods used in gage making.

252a. SCREW THREADS. (P. Eng.), v. 58, no. 1646. Sept. 12, 1918, p. 126. 520 words. ES. LC.(TJ1 P8,v.58)

Sub-title: British standard fine (B. S. F.) screw threads and their tolerances.—Report no. 84, 1918.

This is a review of Report no. 84, 1918, of the Engineering Standards Committee, which supersedes the previous Report no. 38.

It is a report on the "Tolerances of British standard fine (B. S. F.) screw threads, of the British Engineering Standards Association. There are two appendices to the report, one defining the terms "grade" and "play" as applied to a screw thread, the other showing how the formulae for determining the reduction in effective diameter required to compensate errors in angle and pitch are obtained.

253. SCREW THREAD TOLERANCES. (Horseless A.), v. 39, no. 4. Feb. 15, 1917, Engineering section, p. 4. 220 words. LC.(TL1 H81,v.39)

Short note. Relates to the hearing held before Congress relating to a proposed law on tolerances, etc.

254. SCREW THREAD TOLERANCES. (Mach.), v. 23, March, 1917, p. 614. 400 words. ES.—Pam. LC.(TJ1M21,v.23)

A brief note relating to the hearing in Feb., of Congress, with reference to the proposed law on standard tolerances, clearances, and allowances.

255. SCREW-THREAD TOLERANCES FOR MUNITIONS. Special correspondence. (Am. Mach.), v. 48, no. 4. Jan. 24, 1918, p. 135-136, incl. 3 figs. (diagrs., sections), tables i-iv. ES. LC.(TJ1 A5,v.48)

Figs. 1-3. Screw-thread tolerances.

Table i. Tolerances for close fits. ii. . . . for medium fits. iii. . . . for loose fits. iv. U. S. standard screw-thread dimensions.

256. SEBERT, H.

Note sur les dispositions proposées par le Département de la Marine (direction des constructions navales de Brest) pour l'unification des vis de petit calibre, par M. le général Sebert. (S. E. I. N.), Bulletin. 110e année, t. 115, no. 3, mars, 1911, p. 373-383. 2 tables. 3500 words. LC.(T2S6,v.115)

At head of title: Commission des filetages.

Proposals of the Bureau of Construction of the Navy Dept., France, for the standardization of small screw threads, presented for consideration to the Screw Thread Commission of the Society for the Encouragement of National Industry, France.

257. SEBERT, H.

Unification des filetages. Note en réponse à une demande de M. le Commandant de l'Aviation Navale britannique, à Paris. Par H. Sebert, Président de la Commission des filetages. (S. E. I. N.), 115e année, 1er sémestre, t. 125, no. 1, janvier-fév., 1916, p. 44-46. LC.(T2 S6,v.125)

257a. SECURING ANY KIND OF FIT DESIRED. (Am. Mach.), v. 46, no. 11, March 15, 1917, p. 450. ES. LC.(TJ1(5,v.46)

Treats on fits, limits and tolerances.

258. SELLERS, WILLIAM.

On a system of screw threads and nuts. Paper read by William Sellers, Esq., President of the Franklin Institute, April 21, 1864. (Frank. I.), v. 77, 1864, p. 344-351, incl. 5 tables. Plate no. ii, iii. ES. 11429

Committee appointed to investigate the question of a proper system of screw threads, bolt-heads, and nuts for the general adoption by American engineers, consisted of: W. B. Ement, C. T. Parry, J. V. Merrick, J. H. Towne, C. Sellers, B. H. Bartol, Edw. Longstreth, Jas. Moore, and J. W. Murphy.

"Mr. E. Longstreth exhibited an instrument for setting the tools of screw-cutting lathes, so as to bring the point of the tool at right angles with the surface to be cut. It consists . . ."

259. THE SELLERS OR FRANKLIN INSTITUTE SYSTEM OF SCREW-THREADS. (Frank. I.), v. 123, 1887, p. 261-276. ES. 14374

Correspondence from various domestic and foreign sources, grown out of an inquiry addressed to the Institute by the Society of German Engineers of Berlin.

260. THE "SELLERS" OR FRANKLIN INSTITUTE SYSTEM OF SCREW-THREADS. (Inst. Civ. E.), v. lxxxix, 1887, p. 541-542. ES. 9375 LC.(TA1 I6,v.89)

Abstract of article in: Journal of the Franklin Institute, April, 1887, p. 261.

The Sellers system was favorably reported by a committee of the Franklin Institute, and adopted by the U. S. Govt. in 1868.

260a. SHEFFIELD THREAD-LEAD TESTING MACHINE FOR SCREW GAGES. (Am. Mach.), v. 49, no. 4. July 25, 1918, p. 180, incl. 1 half-tone. ES. LC.(TJ1A5,v.49)

Description of a testing machine for the lead of screw-thread gages. The machine has been placed on the market by the Sheffield Machine and Tool co., Springfield, O.

261. SHRIER, F. W.

Measuring diameters of screw threads. (Mach.), v. xxiv, March, 1918, p. 648, incl. 1 fig. ES.—Pam. LC.(TJ1M2,v.24)

262. A 600,000 POUNDS SCREW-TESTING MACHINE. Editorial correspondence. (Am. Mach.), v. xxviii, part ii, no. 51, Dec. 21, 1905, p. 833-836. 1000 words. 1 half-tone, 3 outline figs. (sections, diagrs., etc.). LC. (TJ1 A5,v.28-1)

Article describes a fine machine recently perfected for the University of Illinois.

263. [SKERRETT, W. H. W.]
Standard test specimens. In his: Development of gun manufacture, by W. H. W. Skerrett, Inspector of Ordnance, O. R. C., U. S. A. (Soc. Autom. E.), Journal, v. iii, no. 2, Aug., 1918, p. 153-164. With discussions. 11 outline figs. (illus., sections, etc.). LC.(TL1 S6,v.3)

264. SMART, H.
Pitch diameter of 90-degree threads. (Mach.), v. 21. Aug. 1915, p. 1011, incl. diagrs. ES.—Pam. LC.(TJ1M2,v.21)

265. SMITH, DAVID J.
The repair of motor vehicles. (Inst Autom. E.), v. vi, session 1911-12, p. 132-194, incl. discussion and correspondence. PO.
p. 152-153, 163, 170-171, 183 contain remarks on screw threads.
"Standardization," p. 152-153.
". . . The question of screw threads is one of the most pressing of repairers' troubles," p. 153.
Col. Crompton remarks concerning interchangeability of screw threads and his work at the subject for the Standard committee, p. 170-171.

266. SNOW, OLIN.
Cap-screws, bolts and studs. Letter to the editor. (J. Ry. App.), May, 1899, p. 120, incl. 2 figs. (sections). Pat. Off. Lib.

267. [LA SOCIETE ALSACIENNE DE CONSTRUCTIONS MECANIQUES.]
Applications du système francais de filetages. (S. E. I. N.), 97e année, 5e série, t. iii, janvier, 1898, p. 84-85, incl. figs. 1-5 (7 sections). LC.(T2 S6,v.3,1898)

268. [SOCIETE D'ENCOURAGEMENT . . .]
Unification des filetages. (S. E. I. N.), 103 année, t. 106, no. 9. 30 sept., 1904, p. 647-663. 6000 words. Tables. LC.(T2,S6,v.106,1904)
"Note sur un projet tendant à l'unification des petites vis d'un diamètre inférieur à six mm.," par. M. E. Sartiaux, Président du Syndicat professionnel des industries électriques, p. 649-651.
"Rapport de la deuxième commission du Syndicat professionnel des industries électriques. Étude et propositions sur l'unification des vis en dessons de 6 mm.," p. 651-652.
"Résumé du rapport de M. le général Sebert," p. 652-654.
"Résumé du rapport de M. Bariquand et Marre," p. 655.
"Résumé du rapport de M. Sauvage," p. 655-663.
Introduction is signed: "Pour le Bureau: Le President de la Société d'Encouragement. H. Le Chatelier."

269. [SOCIETE D'ENCOURAGEMENT . . .]
Unification des filetages. Règles d'etablissement des boulons, goujons et vis employés dans les constructions du matériel de transport. (S. E. I. N.), 116e année, 2e sémestre, t. 128, no. 4, juillet-août, 1917, p. [84]. 150 353. 26 figs., 4 fold. plates, tables. LC. (T2S6,v.127)

270. [SOCIETE D'ENCOURAGEMENT . . .]
Unification des filetages. Règles d'etablissement des boulons, goujons et vis employés dans les constructions du matérial de transport. (S. E. I. N.), 116 année, 2e sémestre, t. 128, no. 4, juillet-août, 1917, p. 85. 150 words. LC.(T2S6,v.128)

271. SOCIETY OF AUTOMOTIVE ENGINEERS, N. Y.

Current standardization work. (Soc. Autom. E.), Journal, v. ii, no. 5, May, 1918, p. 370-374. 3 tables. LC. (TL1S6,v.2)

Contents.—Aeronautic division meeting. (Subjects: Airplane nuts, bolts, and turnbuckles.)—Bolt diameter limits.—Bolt thread lengths.—Bolt head and nut dimensions.—Bolt head and nut chamfer.—Bolts with threaded ends.—Plain ball hexagon bolt heads, p. 370.—Turnbuckles.—Data sheets div. meeting.—Indexing system.—Size of data sheets.—Altitude curves.—Electrical equipment div. meeting.—Starting switches, p. 371.—Cable terminals.—Marking of fuses.—Mounting dimensions for electrical instruments.—Distributor mounting dimensions.—Generator bracket mounting.—Starting motor mounting.—Nomenclature div. meeting.—Nomenclature for aeronautics, p. 372.—Tire and rim div. meeting, p. 373.—Routine test of rims.—Pneumatic tire sizes for passenger cars.—Carrying capacity and inflation pressures.—Motorcycle tires.—Valve holes.—Rim sections (base bands) for solid tires.—Wood spokes.—Coöperation with tire and rim association.—Data sheet correction, p. 374.

272. SPRINGER, J. F.

A method of finding sizes of rolled thread screw blanks. (Am. Mach.), v. xxxiii, part i, May 26, 1910, p. 971-972, incl. 3 figs., formulas. ES. 15694 LC.(TJ1 A5,v.33-1)

Sub-title: Only an approximate diameter formula can be derived.

273. SPRINGER, J. F.

Principles of thread rolling and the setting of the dies. (Am. Mach.), v. xxxiii, part i, April 21, 1910, p. 739-741, incl. 4 figs., formulas. ES. 15694 LC.(TJ1 A5,v.33-1)

Sub-title: Determining pitch, angle of thread and position of the dies.

274. STABEL, JOS. M.

Measuring external thread diameters. (Mach., Eng. ed.), v. 2, no. 5. Jan., 1904, p. 248-250. 1600 words. 3 figs., 3 tables. LC. (TJ1M21,v.2)

Sub-title: Method of thread measurement by means of wires and micrometers.

275. STAMBKE.

Referat ueber den gegenwaertigen stand der frage betreffend die einfuehrung eines metrischen gewindesystems. (Annalen fuer gewerbe und bauwesen, hrsg. von F. C. Glaser, Berlin), Band 43, Nov. 1, 1898, p. 173-178, incl. 1 double-page table. PO.

"Vorschlaege fuer ein einheitliches gewindesystem," p. 174-178.

Statement regarding the present status of a uniform standard metric screw-thread system, with reference to the Swiss conference, by Chief building inspector Stambke, in behalf of the German Railroad Association.

276. THE STANDARDIZATION OF SCREW THREADS. (Eng.), v. 69, Jan. 19, 1900, p. 75-77; Feb. 2, 1900, p. 143-145; Feb. 9, 1900, p. 176-179, incl. 17 figs., (Diagrs., sections, etc.), tables i-xx. ES. LC. (TA1, E55, v. 69.)

277. THE STANDARDIZATION OF SCREW THREADS. (Eng.), v. ciii, no. 2676, April 13, 1917, p. 360, incl. 4 figs. (diagrs.), 1 table. ES. LC. (TA1, E55, v. 103.)

Table: The standardization of screw threads; the Whitworth thread.

Article refers to a questionnaire sent out by the Engineering Standards Committee regarding the advisability of standardizing screw threads, including a letter from the secretary, Mr. C. Le Maistre.

278. STANDARDIZATION OF SCREW THREADS. (Am. Mach.), v. 48, no. 26, June 27, 1918, p. 1103.

ES. LC.(TJ1 A5,v.48)

Remarks concerning H. R. bill 10852, on standardization of screw-threads by the editor, and text of bill.

279. STANDARDIZATION OF THREADS OF SOCKETS AND LAMP BASES. (Elec. W.) v. 67. Jan. 29, 1916, p. 260. ES. LC. (TK1, E5, v. 67.)

The same in: (Mach.), v. 22. Feb., 1916, p. 510. LC.(TJ1M21,v.22)

280. STANDARDIZING SYMBOLS FOR SCREW-THREAD NOTATION AND FORMULAS. (Am. Mach.), v. 47, no. 8. Aug. 23, 1917, p. 326, 350 words, incl. symbols for screw-thread formulas. ES. LC. (TJ1, A5, v. 47.)

281. STANDARD SCREW THREADS AND LIMIT GAUGES. (Mech. Eng.), v. 13, no. 323, April 2, 1904, p. 482. 220 words. LC. (TJ1M4, v. 13.)

282. STANLEY, F. A.

Gages for Briggs standard pipe threads and for standard oil well casing. (Am. Mach.), v. 28, no. 18. May 4, 1905, p. 575-580. 10 figs. (half-tones, sections, etc.) LC. (TJ1, A5, v. 28.)

283. STEELMAN, JAMES.

The rollign of screw threads. (Cass. E. M.), July, 1916. 3,800 words. LC. (TA1C34, 1916.)

284. STETSON, GEORGE R.

Franklin Institute standard screw thread. (Frank. I.), v. 107, 1879, p. p. 244-247. ES. 11459.

Letter by Mr. Stetson, p. 244-247, addressed to the Committee on Publication, Franklin Inst., Phila., dated, New Bedford, Mass., Feb. 10, 1879.

285. [STOREY, J. E.]

Methods of correcting inaccuracies of screw threads. (Mech. E.), v. xvii, no. 429. April 14, 1906, p. 529-530, incl. 2 figs. (sections, etc.). 700 words. LC. (TJ1M4, v. 17.)

Describes a method recently patented by J. E. Storey and the Newall Engineering co., ltd., Atherton's Quay, Warrington. It can be applied to measuring apparatus, dividing machines, and other instruments of precision.

[SUPLEE, HENRY HARRISON. See REULEAUX, FRANZ.

286. SUPLEE, HENRY HARRISON.

Metric screw threads. (J. Ry. App.), Feb., 1900, p. 389.

Pat. Off. Lib.

287. SUPLEE, HENRY HARRISON.

Metric screw threads. (Mach.), v. 6, no. 6, Feb., 1900, p. 165. 600 words. LC. (TJ1 M2, v. 6.)

Author shows that it is not necessary to equip American lathes with metric lead screws, and describes the change gears which enable metric screws to be cut with English lead screws.

288. SWEET, JOHN E.

Screw threads most in use. (Am. Mach.), v. xxx, pt. 1, June 20, 1907, p. 888-889. ES. 8675. LC. (TJ1, A5, v. 30-1.)

Brief discussion of the various thread systems.

Under heading: "Practical letters from our readers."

289. SYSTEME INTERNATIONAL DES FILETAGES A BASE METRIQUE. (Génie C.), 21e année, t. xxviii, no. 20 (no 979), 16 mars, 1901, p. 333. 1 table.
LC. (TA2 G3, v. 28.)

290. TAP AND SCREW LIMITS.
(Mach.), v. 22, no. 1. Sept., 1915, p. 54-57, 4,000 words, incl. 7 figs., 1 table. LC. (TJ1M21, v. 22.)
Sub-title: The importance of obtaining more intelligent specifications for taps and threading dies.

290a. TESTING SCREW THREADS. (Sci. Am. S.), v. lxxxv, no. 2215. June 15, 1918, p. 380; 381, incl. 3 figs. (diagrs., sections).
ES. LC. (T1F25, v. 85.)
From "The Engineer."
Sub-title: Optical projection apparatus for securing accuracy.

291. THOMPSON, WILFRID J.
Wear in micrometer screw. Letter to editor. (Mach.), v. 24, no. 4. Dec., 1917, p. 346-347. 250 words. LC. (TJ1M21 v. 24.)

292. THORN, LEONARD M.
Rethreading fixture. (Am. Mach.), v. 48, no. 3. Jan. 17, 1918 p. 19. 350 words, incl. 1 fig. ES LC. (TJ1, A5, v. 48.)
Figure shows fixture for rethreading used, and found to be a great saving over the old way.

293. THORN, LEONARD M.
Thread-lead gage. (Am. Mach.), v. 47, no. 25. Dec. 20, 1917, p. 1092. 230 words, incl. 1 fig. ES. LC. (TJ1 A5 v. 47.)
See also Woodworth, Walter J.

294. TOOLS FOR EXTRACTING BROKEN SET SCREWS. (Iron Age), v. 99, no. 3. Jan. 18, 1917, p. 191, 320 words, incl. 1 half-tone. (3 figs.)
(T1, 17, v. 99.)
Describes a tool for extracting broken set and cap screws, studs, staybolts, etc., developed by the Cleveland Twist Drill co., Cleveland, O.

294a. TRACEY ANGLE FIXTURE, THREAD-MILLING ATTACHMENT AND LEAD-SCREW TESTER. (Am. Mach.), v. 49, no. 14. Oct. 3, 1918, p. 638-639, incl. 3 half-tones. ES. LC. (TJ1A5, v. 49.)
Illustrations.—1. "Beckett" universal angle fixture.—2. "Beckett thread-milling attachment.—3. "Lea" lead-screw tester.

295. TROWBRIDGE, AMASA.
Comparison of screw thread standards. By Amasa Trowbridge, Hartford, Conn. Paper no. 1,200. (Am. Soc. M. E.), v. 30, 1908, p. [373]-384, incl. 3 diagrs., 1 table, formulas. With discussion.
ES. 14655. LC (TJ1, A7, v. 30.)
Formulas, p. 379: U. S. standard, British fine standard, Bond standard, Lewis standard, proposed intermediate standard.

296. TYLER, CHARLES C.
A proposed standard for machine screw thread sizes. (Am. Soc. M. E.), Paper no. 944. v. xxiii, May, 1902, p. 603-631. 3,500 words. Figs. no. 256-256 (half-tones, sections, etc.), tables i-v, and 3 tables. (TJ1, A7, v. 23.)
Contents.—Form of thread.—Diameters of screws.—Pitch of screws.—Modi-

fication of thread form.—Standard reference thread gauges.—Basic standard reference thread gauges.—Standard reference thread gauges for screws.—The same, for taps.—Working gauges for screws.—The same, for taps.—Limits of variation in screw and tap diameters.—Limits of variation in screw and tap pitches.—Special indicating instruments.—Discussion.

Author calls attention to the inconvenience caused from the variation in size and proposes a standard having an angle of 60 degrees and a flat at the top of the thread equal to 1-8 of the pitch.

297. L'UNIFICATION DES FILETAGES A L'ÈTRANGER. (S. E. I. N.), 97 année, 5e série, t. iii, février, 1898, p. [203]-219. LC.(T2,S6,v.3,1898)

"Rapport sur l'état de la question de l'unification des systèmes de filetages et de jauges," p. 204-210.—Programme pour le Congrès international à convoquer éventuellement, p. 210-219.

298. UNIFICATION DES FILETAGES DE VIS. (Tech. M.), v. ii, no. 6, juin, 1910, p. 379.

299. UNIFORM SCREW THREADS FOR ALL COUNTRIES. Special correspondence. (Am. Mach.), v. 49, no. 3. July 18, 1918, p. 117-119.

ES. LC.(TJ1 A5,v.49)

Article discusses several interesting points brought out in the report of E. H. Ehrman to the S. A. E. concerning the results of the screw-thread conference held by the International Standards Committee in London.

300. UNWIN, WILLIAM CAWTHORNE.

A suggested modification of the Whitworth screw thread. (Eng.), v. ciii, no. 2668, Feb. 16, 1917, p. 158-159. 1600 words. 2 figs. (diagr., etc.), 4 tables. ES. LC.(TA1E55,v.103)

Author aims to find means for interchanging the Whitworth screw with more facility.

301. WALDMAN, JOSEPH.

Thread cutting tools. (Mach., shop edition), v. 20, no 1. Sept., 1913, p. 29-30. 3 outline cuts; p. 53-54. 3 figs. ES.—Pam. LC.(TJ1M2,v.20)

302. WAR DEPARTMENT TOLERANCES FOR SCREW THREADS. (Mach.), v. 25, no. 5. Jan., 1918, p. 457-458, incl. 3 figs., 1 table. LC.(TJ1M21,v.24)

Diagrams show War Dept. method of giving tolerances on screw threads.

Table: Ordnance Dept. table of tolerances for screw threads (U. S. standard form), p. 457.

303. WELLS, F. O.

Individual paper on the standardization of screw threads. (Am. Ry. M. M. A.), v. xlix, 1916, p. 70-81, incl. 9 figs. (half-tones, diagrs., sections), 3 tables, formulas. LC.(TF1 A5, v.49)

Contents.—Introduction.—The screw as basic.—The U. S. standard thread.—The V form of thread.—Standardization of screws and taps.—Tolerances.—Inspection.—Depth of thread in a tapped hole.—Lead and pitch diameter. Rake of taps and dies.—Safety first.

304. WELLS, F. O.

Standardization of screw threads. (Ry. R.), v. 58, June 24, 1916, p. 926-927. LC.(TF1 R4,v.58)

305. WELLS, F. O.

Taps and screws. By F. O. Wells and H. E. Harris. (Am. Soc. M. E.), Journal. v. xxiv, pt. 2, 1912, p. 1035-1063. With discussion. 7800 words,

incl. 19 figs. (half-tones, diagrs., etc.), tables 1-3. LC.(TJ1 T72,v.24-2)
Discusses some of the problems of tap and die making.

306. WHITNEY, ELAM.
Slotting and shaping in the automatic screw machine. (Am. Mach.), v. 48, no. 5. Jan. 31, 1918, p. 209, incl. 3 figs. (sections).
ES. LC.(TJ1 A5,v.48)
Figs. 1-3. Slotting and shaping attachment.
The tools described in this article are used at attachments for Brown & Sharpe automatic screw machine.

307. WHITWORTH, JOSEPH.
On a uniform system of screw threads. Communicated to the Institution of Civil Engineers, 1841. By Joseph Whitworth, Esq., Assoc., Inst. C. E. (Frank. I.), v. 33, 1842, p. 327-328. 1 table. ES. 11294
From London Mec. Mag., Oct., 1841.

308. WHITWORTH, JOSEPH.
On a uniform system of screw threads. (Inst. Civ. E.), v. i, 1837, p. 157-160. With discussion. 1 table. ES. 21150 LC.(TA1 I 6,v.1,1837)

309. WHITWORTH VS. SELLERS THREAD. (J. Ry. App.), May, 1899, p. 111, incl. 2 figs. (diagrs.) PO.

310. WILLIAMS, FRED. R.
The microscope for inspecting screws. (Am. Mach.), v. 46, no. 17. April 26, 1917, p. 736. 350 words, incl. 1 half-tone.
ES. LC.(TJ1 A5,v.46)
Illustration: The microscope and the fixtures used in adapting it for testing threads.
Author treats on accurate checking of hobs, taps, thread chasers, forming cutters and a number of other tools with cutting edges. . . . He also refers to the chapter on "The use of the compound microscope in the toolroom" in the work under the title: Accurate tool work, by Goodrich and Stanley.

311. WILSON, JOSEPH C.
Jigs for castings and steel parts. (Am. Mach.), v. xxxvii, no. 15, Oct. 10, 1912, p. 591-594, incl. 17 figs. (illus. and sections).
ES. LC.(TJ1A5,v.37)
Treats on important points in design and construction of special tools for various classes of work, including cast iron levers, dropforged pieces and small parts made from steel bars. Types of drill jigs and milling and grinding fixtures for different operations, where accurate locating and clamping devices are essential.

312. WOOD, JOHN A.
Conflict of one-half inch thread pitches. (Mach.), v. 22, no. 2. Oct., 1915, p. 148, incl. 3 outline cuts. ES.—Pam. LC.(TJ1M2,v.22)
With note by editor added to article.

313. WOODWORTH, WALTER D.
Making Whitworth thread gages. i. By W. D. Woodworth and Herman W. Bender. (Mach.), v. 24, no. 6. Feb., 1918, p. [483]-493, incl. 17 figs., tables 1-2. LC.(TJ1M21,v.24)

314. WOODWORTH, WALTER J.

Criticism of thread-lead gage. (Am. Mach.), v. 48, no. 9, Feb. 28, 1918, p. 370. 250 words. ES. LC.(TJ1 A5,v.48)

Refers to short articles on the thread-lead gage by L. M. Thorn, which see.

315. WRIGHT, HOWARD H.

Error in wire method of measuring worm threads. (Mach.), v. 24, no. 5. Jan., 1918, p. [429]-440, incl. 1 fig. (diagrs.). LC.(TJ1M21,v.24)

ADDITIONAL ENTRIES.

316. BAGNALL-WILD, R. K.

The use and abuse of steel. By Lieut. Col. R. K. Bagnall-Wild and Lieut. E. W. Birch. (Inst. Autom. E.), v. xi, session 1916-17, p. 307-368, incl. 43 figs. (diagrs., etc.), tables. P.O.

With discussion and communications.

W. H. Sheahan in his paper entered under no 339 states: "Manufacturers contemplating entering into this field, who are without previous experience in machining nickel steel and working to the fine tolerances the aircraft constructor demands, would do well to carefully read 'The use and abuse of steel' . . ."

317. BRITISH ENGINEERING STANDARDS COMMITTEE, Lond.

Report on British standard pipe threads for iron or steel pipes and tubes. (Revised Nov., 1909). Lond., pub. for the Committee by C. Lockwood & son, 1918. ES.

At end: "British engineering standards association. Price list of British standard ass'n. Price list of British standard specifications and reports. July, 1918. (This list cancels all previous lists)."

"Report: "Definitions.—Recommendations."—Table. "Schedule of sizes of British standard pipe threads," p. 14.

318. BRITISH SCIENTIFIC PRODUCTS EXHIBITION.

(Eng.), v. cvi. Sept. 6, 1918, p. 246-250, incl. figs. 4-11 (half-tones). ES. LC.(TA1E55,v.106)

"Optical projection apparatus," p. 248-249.

Fig. 10, 11. Optical projection compartor for testing for testing screw-threads.

319. CROMPTON, R. E. B.

Notes on screw gauges. By Col. R. E. B. Crompton. (Inst. Aut. E.), v. xi, session 1916-17, p. 173-220, incl. 12 figs. (diagrs., etc.), 1 table. P.O.

Discussion by W. Taylor, Col. Bagnall,Wild, A. H. Sturdes, Dr. R. T. Glazebrook, Capt. A. A. Ross, M. F. Ryan. Communications from: C. F. Halsall, Prof. A. Sharp, C. E. Stromeyer, A. A. Remington.

Contents.—Nomenclature, p. 173-174; 213—Short history, p. 174.—Tolerances on screwed work must include allowances—Effect of excessive tolerance on strength—Effect of clearances, p. 182-183—Adoption of high crested taps, p. 183-184—Division of gauges into two classes. Means by which wear of gauges can be met. Gauging nuts, p. 184-185; 214—Angle and forms of thread, p. 185-186; 215.

320. DOORAKKERS, G.

Taps and dies for production work. i. (Engi.), v. cxxvi, no. 3269. Aug. 23, 1918, p. 151-152, incl. figs. 1-5 (sections, etc.); ii. no. 3270. Aug. 30, 1918, p. 186, incl. figs. 6-11 (charts, section). ES. LC.(TA1E5,v.126)

321. ENGINEERING STANDARDS COMMITTEE, London.

Report on British standard nuts, bolt-heads, and spanners. 3d issue. Leslie S. Robertson, . . . sec'y. Lond., pub. for the Committee by C. Lockwood & son, 1908. ES.

11 numb. l., incl. diagrs., sections, tables. 33cm. ([Report] no. 28. Rev., Nov., 1908). At head of title: The Engineering standards committee.

See also title entry no. 16.

322. ENGINEERING STANDARDS COMMITTEE, London.

Report on British standard screw threads. Leslie S. Robertson . . . sec'y. Lond., pub. for the Committee by C. Lockwood & son, 1913. ES.

13 numb. l., incl. diagrs., tables. 33cm. ([Report] no. 20. Revised Feb., 1913). At head of title: The Engineering standards committee.

"Nomenclature and definitions," 6, 7.

323. FISCHER, C. J.

A practical ring, plug, and snap gage system. (Mach.), v. 25, no. 3. Nov., 1918, p. 219-221, incl. 10 figs. (sections, etc.) LC.(TJ1M21,v.25)

Details of a gaging system in which the requirements in interchangeable manufacture have been met.

324. FUNNELL, H. M.

Thread-measuring formulas. (Am. Mach.), v. 49, no. 19. Nov. 7, 1918, p. 839. 350 words, incl. 1 diagr.

. . . "When using the three-wire system of measuring threads the usual formulas given in various popular handbooks are correct only when the thread is standard, . . .

325. GARDNER, GUY H.

Cutting screw threads by a primitive method. (Mach.), v. 25, no. 3. Nov., 1918, p. 204. 380 words. LC.(TJ1M21,v.25)

. . . "The following describes the manner in which a country jeweler used this scheme by winding wire around the rod on which the thread is to be cut as a guide . . . to do an otherwise impossible job" . . .

326. GOVERNMENT COMMISSION ON SCREW THREAD STANDARDIZATION.

(Mach.), v. 25, no. 3. Nov., 1918, p. 258. LC.(TJ1M21,v.25)

[Organization—Duties—Meetings—First hearing.]

327. GROAT, BENJAMIN F.

Efficiency of the screw. (Eng. S. W. P.), v. 34, no. 5. June, 1918, p. 377-429, incl. diagrs., figs., tables.

Contents.—General considerations.—Notation and remarks thereon—General formulas—Illustrating uses of the formulas and tables—Application to V-threads—Worm gearing—Data of efficiency test of worm-gear drive—Appendix, "Kingsbury's coefficients."

328. HARRIS, HARRY E.

The relation of screw-thread angles to other functions. (Am. Mach.), v. 49, no. 18. Oct. 31, 1918, p. 800. 250 words.

Author refers to an article by H. Bingham Powell, under the same title.

. . . "I would state unreservedly that it is much more expensive to produce the tools for making Whitworth threads than for the simple straight-lined U. S. standard or International form of threads, particularly in loose precision work" . . .

329. HATTERSLEY, J. F.

Method of expressing tolerances. Letter to editor by J. F. Hattersley, Cleveland, O. (Mach.), v. 25, no. 3. Nov., 1918, p. 254. 450 words. LC.(TJ1M21,v.25)

330. KINGSBURY, ALBERT.

Experiments on the friction of screws. Paper dclxix. (Am. Soc. M. E.), v. xvii, 1896, p. 96-116, incl. figs. 19-21 (half-tone, section, diagrs.), tables i-iv. LC.(TJ1A7,v.17)

With discussion by Prof. R. H. Thurston, W. S. Aldrich, Wm. Kent, J. F. Holloway, O. C. Woolson, Geo. Whitehead, Prof. J. E. Denton, C. L. Newcomb, F. Schuman, C. L. Griffin, Oberlin Smith.

Tables show the "Kingsbury coefficients."

331. MCBRIDE, JAMES.

Some experiments with a screw bolt. Paper ccccl. (Am. Soc. M. E.), v. xii, 1891, p. 781-789, incl. figs. no. 325-327(diagrs., sections). LC(TJ1A7,v.12)

With discussion by Wilfred Lewis and Arthur A. Falkenau.

332. The National Physical Laboratory in 1917-18, (continued). (Eng.), v. cvi, no.2746. Aug.16, 1918, p.178-180, incl.7 figs.(4 half-tones, 3 sections); no.2747. Aug.23,1918, p.208-211,incl.figs.9-18(half-tones,plan, sections); no.2747. Aug.30,1918,p.221-224,incl.figs.19-32(half-tones,sections, etc.) ES --- LC(TA1E55,v.106)

"Floating-micrometer screw-diameter measuring machine," p. 180—"Screw-pitch measuring machine," p. 208-211—"Horizontal projection apparatus," p. 221-224.

Illustrations: Screw-thread projector, The National Physical Laboratory.—Screw-gauge measuring machines, The N. P. L.

333. NATIONAL PHYSICAL LABORATORY, Teddington.

Notes on screw gauges by the Staff of the gauge testing department. Enlarged issue ii. Nov., 1917. Teddington, W. F. Parrott, [1917] 1 p.l., 50 p., incl. 30 figs. (diagrs., sections, etc.) 34cm. ES.

Contents.—The need for accuracy in a gauge—System of testing screw gauges.—Errors of screws—Pitch—Mechanical measurement of plug screws—Notes on tool and methods of generating thread form—Optical measurements of screw gauges. i. Microscope apparatus. ii. Projection apparatus.—Measurement of ring screw gauges.—Appendices. i. Standard screw threads. ii. Formulae for measurement of effective diameter. iii. Mechanical measurement of angle.

334. OBERG, ERIK.

Developing a gaging system for small area and heavy ordnance. (Mach.), v. 25,no. 2. Oct., 1918, p.93-107,incl.12 figs.(half-tones, diagrs.,etc.), tables. LC(TJ1M21,v.25)

First of a series of articles describing principles involved and procedure followed in developing gaging systems for interchangeable manufacture—Based upon experience of Pratt & Whitney co. in furnishing gaging equipment for small arms and heavy ordnance work.

334a. OBERG, ERIK.

Snap and plug gages. (Mach.), v. 25,no.3. Nov.,1918, p.[194]-200, incl. 24 figs.(half-tones,sections,etc.) LC(TJ1M21,v.25)

Second of a series of articles in continuation of the preceding title.

335. Organization and proceedings of National Screw Thread Commission. (Am.Soc.M.E.), Journal. v.40,no.11. Nov.,1918,p.972-973.

ES --- LC(TJ1A72)v.40

The Commission was cormally appointed by the Sec'y of Commerce on Sept. 21, 1918, and divided up into the following committees: 1. Pitches, systems, form of thread. F. O. Wells, Comdr. E. J. Robinson, E. H. Ehrman, H. T. Herr, H. W. Bearce, sec'y.—2. Tolerances, classification: James Hartness, E. H. Ehrman, Col. E. C. Peck, H. L. Van Keuren, sec'y.—3. Nomenclature and terminology: F. O. Wells, Comdr. E. J. Marquart, Maj. O. B. Zimmermann, Robt. Lacy, sec'y.—4. Gages and methods of test: Col. E. C. Peck,, James Hartness, Comdr. E. J. Marquart, H. L. Van Keuren, sec'y.

As stated in the bill, the duties of the Commission are to ascertain and establish standards for screw threads, which shall be submitted to the Secretary of War, the Secretary of the Navy and the Secretary of Commerce for their approval. These standards when approved, shall be adopted and used in the manufacturing plants under the control of the War and Navy departments and so far as practicable in all specifications for screw threads in proposals for manufactured articles, parts or materials to be used under the direction of these departments.

336. POTTER, M, H.

Machining base plug for 9.2-in.high-explosive howitzer shells. (Mach.), v.25,no.3. Nov.,1918, p.227-228, incl.6 figs.(sections, etc.)

LC(TJ1M21,v.25)

Successive order of operations and machines, tools, and gages used.

337. ROGERS, W. A.

An additional contribution to the perfect screw problem. Paper ccccxlvi. (Am.Soc.M.E.), v. xii, 1891, p.725-728, incl.figs.no.227.

LC(TJ1A7,v.12)

Illustration: Screw-cutting engine built by Webber & Philbrick, Waterville, Me., designed by F. B. Philbrick of that zrm.

338. Screw thread commission organized.

(Soc.Autom.E.) v. iii, no.4. Oct.,1918, p.288. ES. LC.

Record of meeting of Sept. 12, 13, 1918, at Bureau of Standards. It was largely for purpose of organization. Commission consists of: Chairman, Dr. S. W. Stratton, Director, Bureau of Standards. Army representatives: Lt. Col. E. C. Peck, M. S. A. E., Ordnance Dept., U. S. A., and Maj. O. B. Zimmerman, Engineer Corps, U. S. A.—Navy representatives: Comdr. S. M. Robinson, Bureau of Steam Engineering, Navy Dept., and Comdr. E. J. Marquart, Bureau of Ordnance, Navy Dept.

The civilian members will be Edwin H. Ehrman and H. T. Herr, for the S. A. E., and James Hartness and F. O. Wells for the A. S. M. E.

339. SHEAHAN, W. H.

Production problems of aircraft bolts, screws and nuts. (Aviation),v. v.no.6. Oct. 15, 1918, p.363-365, incl. 4 figs.(half-tones).

Author is factory superintendent, A. H. & F. H. Lippincott, Director of the Y. M. C. A. School airplane construction, Director of Aero Club of Philadelphia.

340. Tolerances of fine-screw threads.

(Eng.), v. cvi. Sept.6, 1918, p.268. 520 words. ES -- LC(TA1E55,v.106)

This is a review of the new report no. 84, 1918, of the British Engineering Standards Association on Tolerances of British standard fine (B. S. F.) screw threads, those given in the previous report, no. 38, being thus superseded.

341 VAN KEUREN, H. L.

The measurement of thread gages. By H. L. Van Keuren, Chief of Gage section, Bureau of Standards,Wash.,D.C. (Am.Soc.M.E.), Journal. v.40,no.11. Nov.,1918, p.913-918,incl. 8 figs.(half-tones).

ES--LC(TJ1A72,v.40)

Contents.—Measurement of plug thread gages—Measurement of pitch— . . . of form and angle of thread— . . . of core diameter— . . . of full diameter—of effective diameter—Choice of wires—Standardization of wires—Computation of effective diameter—Precautions in making three-wire measurements—Test of ring thread gages—Measurement of pitch or lead— . . . of angle and thread form— . . . of full diameter— . . . of core diameter— . . . of effective diameter.

342. VAN KEUREN, H. L.

Projection lantern for thread measurement by H. L. Keuren and E. C. Griees.(Am.Mach.) v.49, no. 18. Oct.31, 1918, p.805-811, incl. 11 figs (half-tones,sections,etc.)

"The measurement of screw threads presents more kinds of difficulties than almost any other machine part. The apparatus here described has been developed at the Bureau of Standards and is proving very satisfactory, and in common with all developments of the bureau it is free to be used by anyone. The apparatus is easily handled and is well worth careful consideration." 'Synopsis.)

343. WEBSTER, WALTER H.

Finding angles of special screw thread. Answered by W. H. Webster, Cincinnati,O. (Mach.), v.25,no.3. Nov.,1918,p.[256] 200 words.

LC(TJ1M21,v.25)

Refers to communication by J. J. Clark in Machinery, July, 1918, p. 1043. See title entry no. 86.

344. FRYE. ALBERT IRVIN.

Civil engineers' pocket-book; a reference-book for engineers, contractors and students, containing rules, data, methods, formulas and tables. N.Y., 1913. ES20500 LC(TA151F8)

345. [HAWKINS. NEHEMIAH.]

Rogers machinists guide; a practical illustrated treatise on modern machine shop practice, by Wm. Rogers [pseud.] N.Y.,c1913.

ES19756 LC(TJ1160H395)

346. HASWELL, CHARLES HAYNES.

Mechanics' and engineers' pocket-book of tables, rules, and formulas pertaining to mechanics, mathematics, and physics . . . 68th ed.,N.Y., Harper & bros., 1902. ES2134 LC(TA151H35)

347. HUDSON, RALPH GORTON.

The engineers' manual, by Ralph G. Hudson assisted by Jos. Lipka, H. B. Luther and Dean Peabody, jr., N.Y.,1917.

ES24031 LC(TA151H8)

348. KENT, WM.

The mechanical engineer's pocket-book. A reference-book of rules, tables, data, and formulae, for the use of engineers, mechanics, and students. 8th ed., rewritten. N.Y.,1913 ES21892 LC(TA151K36)

349. KIDDER, FRANK E.
The architects' and builders' pocketbook . . . by the late Frank E. Kidder . . . compiled by a staff of specialists, Thomas Nolan, editor-in-chief. 16th ed., rewritten, N.Y.,1916. ES22393 LC(TH151K5)

350. LAHARPE, CL. DE.
De Laharpe et l'ingénieur et du constructeur-mécancien; mathématiques, mécanique, électricité, chemin de fer, mines, métallurgie, etc., par un comité d'ingénieurs, sous la direction de ch. Vigreux, Ch. Milandre, et R. P. Bouquet. 14e édition, revue, corrigée et consid. augmentée, . . . suivi d'un vocabulaire technique en Française, Anglais, Allemand. Paris, 1905 ES. 3727
The same, 17. édition. Paris, 1913. ES. 19790 LC.(TA151 L2)

351. LUCAS, THEODORE.
Audels new marine engineers' guide, a practical treatise on marine engines, boilers and auxiliary machinery, . . . By Theo. Lucas and F. D. Graham, N. Hawkins. N. Y., T. Audel & co., c1918. ES. 24977 LC.(VM600 L94)

352. MACHINERY.
Machinery's handbook for machine shop and drafting-room; a reference book on machine design and shop practice for the mechanical engineer, draftsman, toolmaker and machinist. N. Y., 1915. ES. 21879 LC.(TJ151M3)

353. MACKROW, CLEMENT.
The naval architect's and shipbuilder's pocketbook of formulae, rules, and tables and marine engineer's and surveyor's handy book of reference. 8th ed., carefully rev., and enl. N. Y., Lond., 1902. ES 2191 LC.(VM151M2)

354. MARKS, LIONEL SIMEON, ed.
Mechanical engineers' handbook, based on the "Hütte" and prepared by a staff of specialists, Lionel S. Marks, editor-in-chief. 1st ed., N. Y., 1916. ES. 23400 LC.(TJ151M37)

355. MERRIMAN, MANSFIELD, editor.
American civil engineers' pocket book; editor-in-chief, M. Merriman; associate editors, Ira O. Baker, A. H. Blanchard [and others]. 1st enl. ed. N. Y., 1912. ES. 20371 LC.(TA151M4)

356. PEIRCE, CLARENCE A., comp.
Handbook of formulas and tables for engineers, compiled by C. A. Peirce, with mathematical sections by W. B. Carver. 2d rev., and enl. ed. N. Y., 1916. ES. 24280 LC.(TA151P6

357. SEATON, ALBERT EDWARD.
A pocket book of marine engineering rules and tables. . . . 7th rev., and enl. ed., Lond., C. Griffin & co., ltd., N. Y., Van Nostrand co., 1903. ES. 2099 LC.(VM600 S46)

358. SHIELDS, CHARLES J.

Mechanics' guide, hand book; this hand book contains practical tables for automobile owners, chauffeurs, auto mechanics, engineers, draftsmen, teachers, students, machinists, tool makers, pattern makers, etc. St. Louis, Mo., c1917. ES. 24658 LC.(TJ151S6)

359. SUPLEE, H. H.

The mechanical engineer's reference book. . . . Lond., & Phila., c1913. ES. 20572 LC.(TA151S96)

360. TRAUTWINE, JOHN CRESSON.

The civil engineer's pocket book, by John C. Trautwine . . . rev. by John C. Trautwine, jr., and John C. Trautwine. 3d . . . 19th ed., . . . Phila., 1913. ES. 20075 LC.(TA151T77)

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